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ABSTRACT

A study examined the characteristics and features of vocational, technical, and adult education (VTAE) programs that encourage and/or inhibit entrepreneurship competencies. The study population included random samples of 50 students drawn from each of Wisconsin's VTAE districts, 30 occupational instructors from each district, and 30 graduates of VTAE programs in each of the districts (with a minimum of 10 entrepreneurs in each group of graduates). It was concluded that additional workshops should be provided to present information related to the competencies needed to start a business and that VTAE programs themselves should provide more information on entrepreneurship. The following conclusions were also drawn: VTAE districts should provide students with access to services and people to help assess the potential and feasibility of their entrepreneurial ideas; the districts' distance learning capabilities, uplinks, downlinks, and interactive video should be used to expose students and district residents to entrepreneurs and entrepreneurial education; and VTAE districts should periodically survey their graduates to determine their entrepreneurial activities and needs. (Three-quarters of the document is comprised of appendixes. These include a project information bulletin; agendas of the project advisory committee meetings; the student, instructor, and graduate survey instruments and instructions for administering them; data tables; and written comments on the surveys.) (MN)

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FINAL REPORT
Research Project Conducted
for
Wisconsin Board for Vocationai, Technical and Adult Education
Dr. Robert Sorensen, State Director

Center for Vocational, Technical
and Adult Education
University of Wisconsin-Stout
Menomonie, WI 54751

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Characteristics and Experiences Related to VTAE Programs That Encourage and/or Inhibit Entrepreneurial Competencies

July , 1988

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Characteristics and Experiences Related to VTAE Programs That Encourage and/or Inhibit Entrepreneurial Competencies

The material herein was developed pursuant to Grant Number 30.101.150.318 with the State Board of Vocational, Technical and Adult Education partially reimbursed from the allocation of Federal funds from the Department of Education. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Department of Education or Wisconsin Board for Vocational, Technical and Adult Education position or policy. UW-Stout does not discriminate on the basis of race, sex, religion, age, handicap or national origin.

The WBVTAE Entrepreneurship Project could not have been completed without the funding support of the Wisconsin State Board for Vocational, Technical and Adult Education. James Urness and Merle Bodine of the State Board served as contact persons for this project and provided us with excellent guidance and insights as we proceeded through the objectives of the project. The five individuals who served as advisory committee members for the project, likewise, gave of their time to consult us as we constructed our surveys. The VTAE districts were very receptive to us as we completed interviews of students and staff To have students, staff and graduates complete surveys takes valuable time. We wish to thank each of the districts and the contact people who assisted us in the completion of the surveying. It is our hope that the findings and recommendations of the project will contribute to the development of additional curriculum related to entrepreneurship and subsequently provide necessary information to individuals who desire to become self-employed in their own businesses. Thank you all.

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ABSTRACT

Purpose

The purpose of this study was to identify the characteristics and experiences related to VTAE programs that encouraged and/or inhibited entrepreneurship competencies. The project was to also identify the types of competencies and services that entrepreneurs needed in order to develop a successful enterprise.

Design

This study used three research techniques. One of the thrusts was to identify potential factors that influence entrepreneurial competencies. A second major goal of the research was to complete exploratory research at a sample of VTAE Districts to identify VTAE program and course characteristics and factors that influence entrepreneurial competencies. The third major goal of the research was to survey students enrolled in full-time programs, instructors and graduates of VTAE Districts to identify the types of competencies and services that students need in order to be able to develop a successful enterprise.

Population and Samples

Four sample groups were selected for the study. A random sample of 50 students from each VTAE district was surveyed to obtain information on the entrepreneurial competencies they were developing, their interest in establishing their own business, and the factors that discouraged them from developing their own enterprise. This was increased to a maximum of 100 if the District chose, allowing 25 randomly selected students from each division within their school. Another sample of 30 Occupational Instructors from each of the VTAE Districts was surveyed to identify the strategies and techniques they used to encourage entrepreneurship. A sample of 30 graduates of

each of the VTAE Districts was surveyed to determine the types of educational experiences, information and services that were helpful in improving and/or establishing a new enterprise. These graduates represented a variety of VTAE programs. Of the 30 graduates, the school was to identify a minimum of 10 who were currently considered to be entrepreneurs. The remaining 20 graduates were selected at random.

The recommendations of the study are summarized as follows:

1. Results of the surveys appear to indicate that additional workshops can be provided to present information related to the competencies that survey respondents stated as being important to starting a business and which they stated they needed to learn more about. For example, a sequence (or series) of workshops can be conducted: Workshop 1 "Overview of Entrepreneurship and what is involved in starting a business"; Workshop 2 "Deciding on a business"; Workshop 3 "Developing a business plan"; Workshop 4 "Marketing Research"; Workshop 5 "Financing/Insurance and Liability for the business"; Workshop 6 "Operating the business: accounting and/or bookkeeping skills, customer and employee relations, business law, and, advertising, selling and marketing skills. Individuals attending the workshops could form a support networking group, each providing technical assistance to one another as they pursue their endeavors to start their own businesses. A support group of instructors from the district could provide technical assistance to these individuals on a need basis. Instructors would realize benefits from this involvement as well as the individuals they are assisting. They can share the information they learn in this process to students enrolled in their classes and who may or may not be considering starting their own businesses.

2. VTAE programs should provide more information on entrepreneurship to their students. This is especially true of programs in the T & I area. Because of the relatively high cost of starting a firm in one of the T & I fields, many teachers do not include much information on entrepreneurship. However, most manufacturing companies are based on expertise and technology from one or more T & I areas. Also, T & I teachers need to present low cost/low risk ways to start a business in their field.
3. VTAE districts should provide their students with access to activities, services and people who can help these students assess the potential and feasibility of their entrepreneurial ideas.
4. Students in VTAE programs should receive more information on incubators and technical assistance available to entrepreneurs.
5. Successful entrepreneurs should be scheduled to speak to and interact with VTAE students. For example, this could be accomplished through field trips, visiting speakers, student organization activities, and internships.
6. The district's distance learning capabilities, up-down links, interactive video, etc. should be used to expose students and district residents to entrepreneurs and entrepreneurial education.
7. Continue to inform district residents of their course work and technical assistance available to entrepreneurs.
8. Provide workshops and courses for graduates and district residents who need to expand their entrepreneurial competencies.
9. VTAE districts should periodically survey their graduates to determine their entrepreneurial activities and needs.

Chapter 1

Introduction

Wisconsin's economy has been experiencing the effects of changes under way in the economies of the world and of the United States. Manufacturing has been a major part of the Wisconsin economy and is critical to the overall health of the state. From 1970-80, the employment base grew 29% in Wisconsin. While the national growth rate in manufacturing was 5%, it was 9% in Wisconsin. Wisconsin has a much greater percentage of its labor force in manufacturing than the national average (Birch, 1982). About 13% of the U.S. workforce is engaged in manufacturing. In contrast, Wisconsin had 19% of its workforce in manufacturing.

By the end of 1982, Wisconsin had suffered more economic decline than most states:

> "The recession of the early 1980's also dealt a staggering blow to the make-up of Wisconsin's work force. In 1978 manufacturing of durable goods (machinery: furniture, electrical equipment, etc.) made up 24 percent of Wisconsin's private sector jobs. In 1983 one out of five of those jobs had vanished, and many were not replaced in the recent recovery. By 1986, jobs in manufacturing of durable goods had dropped to 19 percent of the workforce. The good paying jobs for semi-skilled workers declined dramatically" (Pawasarat, 1988, p. 20).

The manufacturing sector of the economy was especially hit hard during the recession of 1980-82 with unemployment running several percentage points higher than the national average. A look at manufacturing employment from 1980 to late 1982 shows that Wisconsin performed no worst than the nation as a whole. However, because of the greater percentage of manufacturing to Wisconsin's economy, a loss of 134,000 jobs from the beginning of 1980 to the end of 1982 resulted (Wisconsin Strategic Development Commission, 1985).

This resulted in an overall employment rate that was higher than the national average during 1981-85.

Some of the loss in jobs was based on the inability of management to recognize the need to retool and reinvest in capital equipment. However, some of this was also based on the inability of Wisconsin's workers to adapt to the new technologies and processes. Part of this problem was the serious lack of high-tech skills by technical workers. Manufacturing firms have recognized the importance of being competitive and must address their high-technology training needs. Both labor and management have important roles to play in the future of Wisconsin manufacturing. The question is whether those industries and workers are in the process of improving their productivity in high-tech areas for the future.

Our educational system must become involved, networked and articulated with each other and with the high-tech training system in business and industry.

> "As the society becomes more complex, the amount of education and training needed to make a productive contribution to the economy becomes greater. Between now and the year 2000, for the first time in history, a majority of all new jobs required post secondary education.
>
> Education and training are the primary systems by which the human capital of a nation is preserved and increased. The speed and efficiency with which these educational systems transmit knowledge governs the rate at which human capital can be developed. Even more than such closely watched indicators as the rate of investment in plant and equipment, human capital information plays a direct role in how fast the economy can grow." (Workforce 2000 -- Work and Workers for the Twenty-First Century).

One way to respond is to excel in technology. Technology can be applied to increase the resources of a nation, to generate wealth that would not exist if the technology were not employed. Technology is a tool that can increase effectiveness and save time and work. Technology makes it possible to manufacture our needs with less effort and less use of natural resources (Ramo, 1988). However, to be competitive in the world marketplace, technology is not enough. Wisconsin must have the present and future labor force equipped with the high-tech competencies needed by business and industry. This calls for an innovative program that ensures that high-tech competencies are being taught at all levels of education to guarantee the prosperity of the state and nation.

Concurrent with these changes, there is a significant increase in service-based industries and businesses. There are especially unique opportunities in the knowledge and information-based service businesses. Although there is a trend to move low-skilled jobs out of the State, there also is evidence of the development of a number of small and innovative manufacturing companies in Wisconsin and nationwide. Some of these are based on high technology, but others are built upon less sophisticated but efficient technology.

David Birch and other economists, who have analyzed the national labor market, have come to a similar conclusion: Small firms create most of the new jobs.

During the last fifteen years, employment in the top "Fortune 500" firms has decreased by six million while total employment has increased 35 million. "High Tech" employment has been estimated to have provided six million new jobs. Thus, the small business and industrial firms have been responsible for much of the increase of the 35 million new jobs. The wave of the future is that employment by small firms will provide most of the jobs (Naisbitt, 1982).

Birch (1982) reports that approximately two-thirds of the replacement jobs during the period 1969-76 were created by firms with 20 or fewer employees. About 80 percent of the jobs were created by firms with 100 or fewer employees. Young firms less than four years old created 80 percent of the replacement jobs. Birch further reports that 89 percent of the newly created jobs are in the service sector.

If, as Birch reports, every place in the country loses eight to ten percent of its businesses every year, then who is filling the gap? The majority of those jobs are replaced by smaller businesses or firms whose proprietors may or may not have the business skills to succeed in a highly regulated and complex society. Birch indicates that the United States has four to five hundred thousand people starting up new businesses every year.

There are many young entrepreneurs who have the technical knowledge to produce a product or provide a service but do not have the business skills that are necessary to survive. A high percentage of new businesses do not survive. This has created a financier's nightmare because of the failure rate of small businesses.

This raises the questions: What should educators--and more specifically, vocational educators--be doing (that they are not doing) to teach entrepreneurial skills to those enrolled? How many graduates from the Vocational, Technical and Adult Education (VTAE) System in Wisconsin have started their own businesses? What were they taught in their programs that assisted them in starting and maintaining their businesses? If entrepreneurial skills are to be taught, what should they be?

The goals of this project are to identify the impact of VTAE experiences on entrepreneurship competencies and to determine the types of services and technical assistance VTAE districts could provide for entrepreneurs.

Purpose

The purpose of this project was to identify the characteristics and experiences related to VTAE programs that encourage and/or inhibit entrepreneurship competencies. The project also identified the types of competencies and services that entrepreneurs needed in order to develop a successful enterprise.

Objectives

The following objectives were established for this study:

1. Develop a synthesis of the factors and resources that encourage and assist entrepreneurs to develop successful enterprises.
2. Identify the degree to which participation in a VTAE program has encouraged VTAE graduates to establish their own enterprises.
3. Identify the types of services and competencies these graduates could use to improve their enterprises.
4. Identify the experiences and factors that encourage students currently in VTAE programs to consider establishing their own enterprises.
5. Identify the factors and experiences in VTAE programs that discourage students currently enrolled from considering establishing their own enterprises.
6. Develop a set of recommendations for VTAE learning experiences, course content, and resources that would facilitate the development of entrepreneurial competencies of students enrolled in VTAE programs.
7. Develop a set of recommendations for VTAE courses that would meet the needs of entrepreneurs.

Definitions

For the purpose of this study, Entrepreneur has been defined as:

> "an individual who undertakes all the risks related to starting and operating a small business. This involves performing all business functions associated with a product or service and includes social and legal responsibilities."

Limitations of Study

The students who were surveyed were daytime students enrolled in vocational diploma programs or associate degree programs. The project did not survey those students who were enrolled only in evening courses nor those enrolled in Adult Continuing Education courses. Students enrolled in part-time programs also were not surveyed.

Most of the VTAE districts chose to have the center mail surveys to their graduates. The study, therefore, could only analyze the data of those who chose to return the survey. Also, each district was asked to identify a minimum of ten graduates who were already identified as being in business for themselves. Some districts returned names and addresses of from 10-30 graduates who were in business for themselves. While the information obtained from these individuals would provide considerable information on competencies they did or did not learn while in school and which would have assisted them in their business ventures, the results could mislead the reader into believing that many graduates become entrepreneurs. This is not the case.

Assumptions

The assumptions that are being made in this study are:

(1) Entrepreneurship is good for the economy.

(2) Some competencies required of individuals becoming entrepreneurs can be learned in a school environment.

Chapter 2

Review of Literature

The study was begun in early October of 1987 with a review of available literature on entrepreneurship and entrepreneurial skills. Many journal articles and reports related to entrepreneurship were found to exist in ERIC (Educational Resources Information Center). Books and publications related to starting and operating a small business were also located. The National Alliance of Business and the Small Business Administration have developed a series of publications on starting businesses. Newspapers regularly write articles on entrepreneurship, including: seeking assistance in starting a business, financing a business, franchising, successful entrepreneurs and others in the process of becoming self-sustaining, and so on. These materials were reviewed for their relevance in completing the purpose and objectives of the study. The more relevant documents of those revlewed are briefly described below.

Many of the more recent documents included statistical information on small businesses: the number of new business ventures being started; the percentages that fail within five years; the number of women who are entering the entrepreneurship field; and, the reasons why the businesses are failing. According to the statistical information found, approximately 95% of the businesses in the United States are considered small and there will be about 600,000 new business ventures in 1986 (Leaming, 1986). The rate of failure of small businesses in the United States is considered high; in excess of 80% of these businesses discontinue operations within five years of their inception (Lehman, 1982; Williams, 1986). Why do small businesses fail? Williams (1986) stated that most experts mention "poor management" as the major reason for failure and that the underlying causes appear to be lack of experience and incompetence. Lehman (1982) had also indicated that the lack

of appropriate management training was the most common factor in the failure of small business ventures during the first years of operation. Lehman further mentioned that "1980 data collected by the University of Wisconsin-Madison School of Business revealed that approximately 37% of the people owning/operating small businesses in Wisconsin have a high school degree or less." The article did not state whether these individuals successfully operated their businesses or whether a large number of them failed.

Williams (1986) contends that while the educational process as it currently exists is well done, it falls short of being complete. Both formal (traditional) and informal (nonacademic) course content are not fully addressing some real issues -- issues of importance to the type of persons who choose to become small business entrepreneurs. There seems to be too few offerings at any level that deals directly with such subjects as goal setting, leadership, problem solving, ability to motivate, decision making, use of feedback, and effective communication, listening, time management, and delegation.

Ashmore (1983) discussed that many vocational education program components lead to entrepreneurship skills, although these are not often identified as entrepreneurship training by vocational educators. They include running small businesses as part of the program (e.g., school stores, car repairs, flower shops, etc.), studying business management, participating in youth club activities, and working with entrepreneurs in the community. Ashmore further stated that what is needed is an understanding of our objectives in teaching students these curriculum areas. How to be successfully self-employed -- it is not likely to be covered completely in any one course. An approach needed that provides an awareness level of entrepreneurship in early vocational programs, an exploration and creativity approach for advanced secondary and postsecondary educational programs, and a

preparation and problem-solving approach for those who are ready to start a business or are already involved. These three levels or approaches to entrepreneurship education should incorporate all the needed competencies, with the learning experiences and outcomes becoming progressively more advanced.

A 3 1/2 year study of over 3,500,000 hours of small business training delivered by 275 community, junior, and technical colleges affiliated with the National Small Business Training Network identified the following as the 10 most popular topics: Business Planning, Basics of Small Business Management, Business Law and Risk Protection, Marketing and Sales, Financial Management and Recordkeeping, Purchasing and Controlling Costs, Inventory Controls, Advertising and Marketing, Strategies of Increasing Selling Power, and, Microcomputers (Ashmore, 1983).

A study by Metcalf (1973) on small business managers showed that successful managers possessed superior amounts of certain personality characteristics. Five characteristics showed a significant correlation to success. They were:

(1) Drive: composed of responsibility, vigor, initiative, persistence, and, health.

(2) Thinking Ability: consists of original, creative, critical, and analytical thinking.

(3) Human Relations Ability: comprises of ascendary, emotional stability, sociability, cautiousness, personal relations, consideration, cheerfulness, cooperation, and, tactfulness.

(4) Communications Ability: composed of verbal comprehension, oral communications, and written communication.

(5) Technical Knowledge: the information a manager has about the physical process of producing goods or services, and his ability to use his information purposefully. 9

A report by E. Edward Harris (1986) indicated that there is an average of 680,000 business formations per year and more than 400,000 business failures per year. The nation's entrepreneurs need more education because small business owners are confronted with "a myriad of difficulties, and they often feel alone against the world as they attempt to fend off bureaucrats and competitors. They need specialized information about their business as well as general knowledge about why and how small businesses succeed and fail."

Hanson (1984) has made comments similar to those of Harris. He has stated that success for an entrepreneurial industry, even survival, depends more and more on business knowledge. The day of the community filled with cottage and "mom-and-pop" enterprises is no more. The role of the entrepreneurial industry is that of filling gaps around the corporate giants, often taking what work the "giant" does not want and often on a short-term basis.

Even with all of this support for entrepreneurship, however, the success or failure of the operation lies primarily in the human element of the industry. This is where vocational education does its work. A decision made at the right time together with the appropriate resources makes or breaks that small industry. Entrepreneurs pay a very high price for this opportunity for success. In 1981, the U.S. News and World Report published an article about the personal loss felt by those entrepreneurs who fail, then go into bankruptcy. Could these people have been educated to succeed?

Beyond A Dream (1985) makes the statement that people who start companies are more likely to come from families in which their parents or close relatives were in businesses for themselves. These older people were examples or "models" for the children. People who start companies seem to have certain psychological characteristics:

(1) They believe they can control their own destinies.

(2) They are less likely to think that forces beyond their own control, such as luck or fate, will determine their success. Their efforts and hard work and determination will make the business succeed.

(3) They tend to be goal-setters.

(4) They take moderate risks.

(5) They tend to be motivated to leave the comforts of a job and try a business.

What are the characteristics of a person who can succeed in an entrepreneurial venture? Stanford (1982) stated that it is difficult to create a list of specific characteristics. Most authors agree that no two individual entrepreneurs are the same. They also agree that most of these characteristics are either very tough or are impossible to teach.

In the review of the articles which discussed various competencies, it became apparent that the competencies could be viewed in one of two ways: as being inherent within the person; or, as being one which could be learned. However, even some of the competencies regarded as being inherent can be learned (to an extent) by individuals through course work. Hanson (1984) discussed that some of these characteristics can be learned through formal education while others can be gained through experience with organized firms. Still others can be obtained through church, social work and/or community work. Entrepreneurial skills and characteristics cannot be neatly packaged and donated to an individual. Further on in the article, Hanson stated that as the business world becomes more complex, it is increasingly important that entrepreneurs be knowledgeable in as many aspects of their businesses as possible. Many educational opportunities, as Hanson mentions, are available to entrepreneurs. Educators classify the learning process into at least two major divisions: formal and informal education. For the purpose of this

paper, formal education is that which is taught in structured settings such as the classroom or in classroom related situations. Informal education is the learning that takes place in everyday living. In most cases, it seems that entrepreneurs can succeed on a steady diet of informal education. Few make it with only formal education. The experience in the informal educational setting is important for success.

The literature refers to the individual characteristics and competencies that entrepreneurs need to have if they are to succeed in their businesses. This information is provided through both examples and specific lists. Many of these materials describe what entrepreneurs do and how they are affected by the desire to work for themselves. Some important characteristics and competencies found in the owners/operators of successful businesses have been noted. These competencies appear on the following page (See Table 1).

Table 1

COMPETENCIES REQUIRED OF INDIVIDUALS BECOMING ENTREPRENEURS

INHERENT	LEARNED
Tough-Mindedness	Goal Setting
Willingness to Work	Problem Solving
Self-Confidence	Verbal/Written Communication
Take Risks	Interpersonal Relations
Creativity	Organization
Flexibility	Empathy
Desire for profit	Marketing Ability
Enthusiasm	Technical Competence
Enjoy their Work	Business Management Competence
Work well with Others	* Business Planning
Intellectual Honesty	* Small Business Management
Need for Achievement	* Marketing and Sales
Need for Self-Esteem	* Financial Mngmt/Recordkeeping
Drive	* Purchasing & Controlling Cost
Aggressive	* Inventory Controls
Competitive	* Advertising & Marketing
Opportunist	* Strategies for Selling
Optimism	* Microcomputers
Good Physical Health	Understand Basic Economics
Need for Independence	Future Oriented (foresight)
	Decision-Making Abilities

In an address to the 1986 Canadian Vocational Association Conference, Smith (1986) spoke of the importance for educators to (1) teach verbal communications [need for precision in language]: (2) teach interpersonal relations [dealing with people]: and, (3) implement problem-solving activities into the curriculum. He further stated that these tasks can be taught as subjects or with any other subject area being taught. Some additional points discussed within the address included:

* Teach management of personal affairs (e.g.. own finances, balancing of checkbook, proper health).
* Be educated for good citizenship (e.g., teach ecology, history, role of technology in society, workings of economic/and political system).
* Bring more people from the workplace in to the schools in order to teach.
* The ability to learn about new tools when they become available must be part of the training process, regardless of the present skill or trade the teacher happens to be teaching (e.g., be comfortable with a computer terminal -- do not necessarily need to be experts).

Ely (1984) suggests that successful entrepreneurs demonstrate two types of occupational competence:

(1) Technical Competence:

They have mastered a trade, a craft, or a unique set of skills that is marketable. Technical competence is made up of the knowledge and skills required to do or make something other people will buy. Technical competence can't be developed after the business is opened; it is a prerequisite for business ownership. It can be learned in formal education settings and through experience.

(2) Business Management Competence:

They have acquired the set of skills needed to plan, organize, and

operate a profitable business. These skills are prerequisite for business ownership. They can be learned in formal education settings or through apprenticeship. It is dangerous, and usually fatal, to expect to develop them after the business is operating.

In addition, successful entrepreneurs also possess two specific personal qualities: (1) Self-Confidence (belief in one's own abilities); and, (2) Intellectual Honesty (willingness to face facts when they are wrong and make adjustments).

In an article on entrepreneurialism in the college system by Johnston (1986), the author discusses the question of whether or not entrepreneurs are born or can teachers train students and staff to become entrepreneurs - and, if so, what climate is needed? He further states the belief that one can build on the latent skills through business education programs and help students develop their confidence to be able to deal with problem solving, planning, budgets, and marketing and, ultimately, help them become more entrepreneurial in their thinking. It is also suggested that "we have to look for students who can 'work smart', conserve energy, or as Lee Iacocca says 'develop the ability to concentrate and use their time well which is everything if they want to succeed in business'." Johnston adds that "a true entrepreneur feels little guilt, is bold, can be ruthless, but can also communicate well and work as a team member when necessary. ...some other attributes that we must look for in our students and that is a sense of knowing their value, and developing a sense of courage, confidence and team work...which education, combined with cooperative work experience or student internship, can certainly help develop."

One article discussed the importance of understanding basic economic principles (Clow, 1984). He stated that business education has been and should continue to be integrally involved in the new wave of interest in

entrepreneurship education. In addition to acquiring competencies in business areas, such as marketing and accounting, entrepreneurs must develop an understanding of basic economic principles. This will help the entrepreneur realize his/her role in our modified market system. One effective way to cover these generalizations is to integrate them into existing courses focusing on the preparation of entrepreneurs. If the students have had considerable economic education prior to taking courses relating to entrepreneurship, a review of these generalizations as they pertain to the entrepreneur will be sufficient. If the students have had little in the way of economic education in their previous schooling, then a more thorough coverage of the principles including how they pertain to the entrepreneur should be implemented.

As can be noted in this review of literature, there is much that has been studied and reported in terms of entrepreneurship and the competencies and characteristics required of entrepreneurs if they are to be successful in their ventures. All of this has been valuable background for this study and has been necessary for the researchers as they developed the surveys.

Chapter 3

Methodology

The proposed project was to be completed in a relatively short period of time (November '87-April '88). In order to gather the necessary data for the study, draw conclusions and make recommendations regarding entrepreneurship education within the VTAE system with the effective use of an advisory committee, it was critical that timelines be maintained. In February, the project was appropriately extended for an additional two months to allow VTAE Districts to return completed surveys,have their data computer processed, and have results returned to them.

One of the first obligations of the project was to recruit individuals to serve on an advisory committee. At the October, 1987, meeting of the University of Wisconsin-Stout VTAE Advisory Committee, members were asked to select a representative from each of the subgroups they represented to serve as their representative to the entrepreneurship project advisory committee. The following individuals were subsequently appointed to the advisory committee:

(1) Dr. Merle W. Bodine, Bureau Director
Bureau of Support Services and Economic Development
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Wisconsin Board of Vocational,. Technical and Adult Education
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A second goal of the project was to review the literature related to entrepreneurship. Searches were made through ERIC, Psychlit Abstracts, and, InfoTrac computer systems at the University of Wisconsin-Stout library. The ERIC system contained more than 500 documents that were developed since 1981. Pertinent information was found in several media formats: microfiche, journal articles, books, and, newspapers. The Center for VTAE also purchased several current books on entrepreneurship. After reviewing the articles, summaries were prepared for those which related to the purpose of the project.

The initial communication with all sixteen district directors was handled by the State Director through an Information Bulletin (See Appendix A). The bulletin from Dr. Robert Sorensen to each of the directors gave them information that the study was underway and also indicating that while all sixteen of the districts would be asked to participate in the study eventually, four districts would be asked to provide background information through staff and student interviews. This would assist the researchers in developing effective survey instruments that would include key items of concern about entrepreneurship in the VTAE system.

The first advisory committee meeting was held on December 10, 1987, at the Holiday Inn in Stevens Point, Wisconsin (Appendix B1). The purpose of

this meeting was to discuss the purpose and goals of the project and to discuss entrepreneurship, i.e., the factors that encourage or discourage entrepreneurs, and, the characteristics or personalities that entrepreneurs appear to possess. Another purpose of the meeting was to select, as a group, four technical colleges in Wisconsin where staff and students could be interviewed. The information obtained from these individuals would then be compared to the characteristics and personality traits described in the literature on entrepreneurship, with additions or deletions being noted. The purpose of the interviews would be to incorporate the information together with the literature review findings and develop surveys on entrepreneurship. The advisory committee recommended that the project complete initial interviews at the following four technical colleges: Chippewa Valley Technical College (Eau Claire, Wisconsin); Fox Valley Technical College (Appleton, Wisconsin); Milwaukee Area Technical College (Milwaukee, Wisconsin); and, Western Wisconsin Technical College (La Crosse, Wisconsin). The technical colleges were to be contacted after the first advisory committee meeting and interview dates were to be arranged and completed during January-February of 1988.

One of the agenda items at the first advisory committee meeting was to brainstorm the information that needed to be obtained from the interviews and, subsequently, the questions that could be asked to obtain this information. The following are the types of questions that the advisory group suggested be asked in the interviewing of instructors and students:

I. <u>Questions to ask Students at Technical Colleges on Entrepreneurship</u>

   a. Have you studied how businesses are started and grow? If "yes", what topics were discussed?

   b. Have you studied: Marketing techniques; Management techniques; Financial management; and, Developing a business?

c. Do your instructors discuss how you can turn your ideas into a successful business?

d. Do your teachers encourage you to think about starting your own business?

e. What causes you to be reluctant to start your own business?

f. What additional competencies (skills) would you need in order to start your own business?

g. Other questions to follow up student comments from the above questions.

II. Questions to ask Instructors at Technical Colleges on Entrepreneurship

a. Within the courses that you teach, do you discuss the factors and competencies required of successful entrepreneurs? If so, what amount of time is devoted to this area, and what methods do you to teach (i.e., films, tours, speakers, etc.)?

b. Within your school, have specific courses been developed on entrepreneurship?

c. Do you provide any type of technical assistance to former students who have become entrepreneurs? Do these former students provide assistance to you as you instruct your current students in entrepreneurship?

d. Do you encourage students to consider becoming entrepreneurs? If so, what do you do to encourage them? If you do not, any specific reasons why?

e. Have you ever been in business for yourself, either in the past or currently? If so, does this help you with your instruction and development of curriculum?

f. Do your students work with business entrepreneurs? Is this part of your classwork or separate from that?

g. Do you assign students to complete projects related to entrepreneurship? What impact does this appear to have with the students? What competencies do they learn from this?

h. Are you working with local incubators? Do you know if your community has an incubator currently functioning?

i. Within the courses you teach, do you study entrepreneurs?

j. What additional competencies do you feel students need to learn to succeed as entrepreneurs?

k. What additional competencies do you need to develop so as to become a better instructor on entrepreneurship?

l. Are you involved with any vocational student organization? If so do you discuss entrepreneurship with these students?

m. Other questions that may follow up any of the above questions.

Based on the information obtained during the course of the interviewing of instructors and students at the four technical colleges, survey items would then be developed.

Interviews

Project staff arranged interview dates with each of the four technical colleges recommended by the advisory committee. Each district was informed that the interviewing would be completed during the one-day visit to their district. The district was to make the necessary arrangements for the interview times with students and staff. One-hour blocks of time were to be established for interviewing students (in groups of 4-8). Two-hour blocks of time were to be established for interviewing instructors/administrators (in groups of 6-8). If necessary, students and staff could be interviewed at the same time; however, both should be from the same program(s). Students and staff participating in the interviews were to be representative of each of the major divisions within the district.

A total of approximately 50 students and 20 occupational instructors/ administrators were interviewed in the four interview districts. The interviews provided many additional points for survey construction to the ones that had come up in the review of literature and the first advisory committee meeting. And, the interviews substantiated the inclusion of questions already being considered for incorporation within the context of the surveys.

At the completion of the interview process at the four districts, project staff reviewed collectively the responses and comments obtained from the interviews. Draft copies of the surveys were constructed based on the information found in the review of literature, from interviews with students and instructors/administrators, and from suggestions of the advisory committee. Surveys which were drafted included: Student Survey, Instructor Survey, and Graduate Survey.

After the three surveys had been constructed, a second advisory committee meeting date was scheduled (Appendix B2). The purpose of this meeting was to discuss the on-site interviews at the four districts and to present the draft copies of the three surveys for advisory committee review. Modifications, deletions and additions to the surveys were made by the advisory committee with input from project staff. The revised surveys were then printed and ready for delivery to each of the VTAE districts: Student Survey (Form 7308), Instructor Survey (Form 7309), and Graduate Survey (Form 7310) (See Appendix C1, C2, and C3).

A contact person was determined for each of the sixteen VTAE districts. This person was generally designated as the Instructional Services Administrator or the Administrator of Research and Evaluation at the district. A letter explaining the purpose and objectives of the project was sent to this person at each of the districts (Appendix D). The letter

requested the participation of the district in the study and also asked the method of surveying graduates which the district preferred (whether they would mail surveys to their graduates or CVTAE would mail the surveys). If the school preferred CVTAE to mail the surveys to the graduates, the district was then requested to send a copy of 30 names and addresses of graduates to CVTAE. It was requested that a minimum of ten of the names be of individuals who the district considered to be in business for themselves.

Fifteen of the sixteen districts responded to the letter, each expressing their willingness to participate in the project study. Table 2, on the next page, shows the districts which agreed to participate in the study as well as the number of surveys which were subsequently completed and returned to CVTAE.

Each of the fifteen districts were sent approximately 75 Student Surveys and 30 Instructor Surveys. Five of the fifteen districts requested to send the Graduate Survey to their graduates. These five districts were each sent 30 Graduate Surveys. The remaining ten districts chose to have the project mail the Graduate Survey to their graduates. Therefore, each of these districts was asked to submit names/addresses of 30 graduates, 10 of whom were to be individuals involved in entrepreneurial activities. Instructions for administering the surveys were sent with the surveys (Appendix E).

Each district was asked to randomly sample students and staff within their district. These individuals were to be representative of all discipline areas operating within the district. Of the 30 graduates to be surveyed, a minimum of 10 were to be involved in entrepreneurial activities and the remaining 20 could be or not be considered to be entrepreneurs.

The VTAE districts were asked to return all completed surveys during April of 1988. Most districts were able to meet this deadline. A third advisory committee meeting was held in early May of 1988 to update committee

Table 2

VTAE Districts Participating in Entrepreneurship Study

	VTAE District	Completed Surveys Returned		
		Student	Instructor	Graduate
1.	Blackhawk Technical College	49	23	13
2.	Chippewa Valley Technical College	99	11	-0-
3.	Fox Valley Technical College	59	30	34
4.	Gateway Technical College	35	19	8
5.	Lakeshore Technical College	11	22	6
6.	Madison Area Technical College	32	11	13
7.	Mid-State Technical College	62	28	14
8.	Milwaukee Area Technical College	36	12	6
9.	Moraine Park Technical College	65	28	20
10.	North Central Technical College	106	26	14
11.	Northeast Wisconsin Technical College	34	14	18
12.	Southwest Wisconsin Technical College	69	17	17
13.	Waukesha Technical College	39	20	7
14.	Western Wisconsin Technical College	27	21	14
15.	Wisconsin Indianhead Technical College	53	21	20
	Total Surveys Returned	776	303	217
	Total Surveys Included in Composite Tables	763	283	204

* Nicolet Technical College did not participate in the study.

Approximately 420 graduate surveys were mailed by CVTAE or the VTAE Districts with 217 being returned for a return response rate of 51%.

members on the status of the surveying and to discuss possible ways that the data results could be analyzed (Appendix F). All surveys were received at CVTAE by mid-May of 1988.

Data Analysis Outline

Comments from all of the different surveys were carefully recorded for analysis. Because of the apparent uniqueness of meaning, very little interpreting was done. The majority of items were appropriately written for computer analysis. The following chart describes how breakouts were done for the various surveys:

	By Sex	By Program Area	By Year in Program	Have You Owned Business
Student Survey	X	X	X	X
Instructor Survey	X	X		X
Graduate Survey	X	X		X

A significant amount of information is available through the various modes of analysis listed above. Composite information (all VTAE Districts participating in survey) will be available for use by each of the districts. Each VTAE district will also receive printouts pertaining to information based solely on survey responses returned by students, instructors and graduates of their district.

Final Report

The final report, including the report of findings, conclusions and recommendations, was begun after the fourth advisory committee meeting, held in June of 1988. The researchers have attempted to report the findings thought to be the most significant for the future of the VTAE system in regards to entrepreneurship.

Chapter 4

Findings of the Study

Introduction

This study of the VTAE system was done to identify the characteristics and experiences related to VTAE programs that encourage and/or inhibit entrepreneurship competencies. This study was also done to identify the types of competencies and services that entrepreneurs needed in order to develop a successful enterprise. To determine competencies generally required of entrepreneurs, available written documents, such as books, journal articles, magazines and newspapers were researched for support documentation. When additional information was needed, it was collected through interviews with students and instructors at four of the sixteen VTAE districts. Finally, surveys were developed and administered to VTAE students, instructors and graduates.

This chapter presents data collected from these various sources. The surveys were entered and processed to provide the researchers several vantage points to view the different student, instructor and graduate populations, including individuals who have been or are currently in business for themselves. Comments from respondents were carefully summarized so as not to change the meaning of the statements.

Table 3, on the following page, indicates the sex of the respondents for each of the three surveys. As the table depicts, there are no significant differences between males and females for the Student and Graduate surveys; however, 70% of the respondents on the Instructor survey were males.

Table 4 provides a breakout of the ages of the respondents for each of the three surveys. Approximately 85% of the in-school students who completed the survey were 34 years of age or younger while 86& of the graduates were

21-44 years of age. Most of the instructors tended to be 35-64 years of age (89%). None of the instructors completing the survey were 24 years of age or younger.

Table 3: Sex of Respondents

Sex	Student	Instructor	Graduate
Male	41% (315)	70% (198)	59% (121)
Female	59% (447)	30% (85)	41% (83)
Total	(763)	(283)	(204)

Table 4: Age of Respondents

Age	Student	Instructor	Graduate
20 or younger	37% (283)	0% (0)	5% (10)
21-24	24% (181)	0% (0)	18% (36)
25-34	24% (185)	8% (24)	43% (88)
35-44	11% (86)	42% (119)	25% (52)
45-54	3% (22)	31% (89)	7% (15)
55-64	0% (3)	16% (46)	1% (2)
65 or older	0% (2)	1% (2)	0% (0)

Table 5 indicates the programs that students and graduates were enrolled in or completed as well as providing a breakout of the programs that the instructors taught:

Student Program Information: Both sexes were representative for each of the six program areas listed on the survey. Two of the program areas tended to have larger numbers of males than females: Agribusiness, 70% male; and, Trade & Industry, 82%. The remaining four program areas tended to have larger percentages of females than males: Business Education, 80%; Health Occupations, 79%; Home Economics, 92%; and, Marketing Education, 65%.

Graduate Program Information: The breakout by sex for graduates of the VTAE districts was similar to the breakout for students, except in Marketing Education, where 63% of the respondents were male, and in Health Occupations, where 100% of the respondents were female. Note: only 204 graduates completed the survey, and in Health Occupations, a total of seven respondents comprised the 100%.

Instructor Program Information: One major observation on the Instructor survey was that all instructors (100%) from the Trade & Industry program area were males (n=81). Approximately 80% of the Agribusiness instructors were male. The remaining four program areas were more closely representative of both sexes: Business Education, 61% male; Health Occupations, 40% male; Home Economics, 44% male; and Marketing Education, 68% male.

Table 6 indicates the degree to which students and graduates believed they received encouragement from their instructors to start their own businesses. Instructors were asked to rate the amount of encouragement they believed that they provided to students in regards to starting their own business. There was no indication that instructors tended to discourage

students from starting their own business; however, only 26% of the students and 32% of the graduates rated instructors as providing some or extensive encouragement. Instructors (46%) stated they provided some or extensive encouragement. A majority of each of the three groups agreed that instructors neither encouraged nor discouraged students in starting a business: students (73%), graduates (66%), and instructors (53%).

Table 5: Program Enrolled In or Instruct In (N)

Program	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agribusiness	35% (21)	30% (9)	(30)	80% (8)	20% (2)	(10)	79% (22)	21% (6)	(28)
Marketing Education	35% (64)	65% (120)	(184)	68% (25)	32% (12)	(37)	63% (31)	37% (18)	(49)
Health Occupations	21% (10)	79% (37)	(47)	40% (6)	60% (9)	(15)	0% (0)	100% (7)	(7)
Home Economics	8% (8)	92% (93)	(101)	44% (14)	56% (18)	(32)	17% (4)	83% (24)	(28)
Business Education	20% (36)	80% (143)	(179)	61% (46)	39% (29)	(75)	40% (10)	60% (15)	(25)
Trade & Industry	82% (169)	18% (38)	(207)	100% (81)	0% (0)	(81)	82% (53)	18% (12)	(65)
Developmental Education				25% (2)	75% (6)	(8)			
General Education				35% (7)	30% (3)	(10)			
Other Programs				0% (0)	100% (2)	(2)			
TOTAL			(748)			(270)			(201)

Table 6: Encouragement to Start Own Business

Degree of Encouragement	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Extensive Encouragement	(19)	(31)	7% (50)	(17)	(9)	9% (26)	(7)	(7)	7% (14)
Some Encouragement	(59)	(84)	19% (143)	(75)	(29)	37% (104)	(27)	(24)	25% (51)
Neither Encourage nor Discourage	(228)	(323)	73% (552)	(101)	(47)	53% (148)	(84)	(47)	66% (131)
Some Discouragement	(3)	(5)	1% (8)	(4)	(0)	1% (4)	(2)	(2)	(4)
Consistent Discouragement	(2)	(1)	(3)						
TOTAL			(756)			(282)			(200)

When the respondent was asked if he/she had ever owned/operated a business (Table 7), 6% of students, 43% of graduates, and 23% of instructors responded "yes, full-time". Another 9% of students, 10% of graduates and 28% of instructors responded "yes, part-time". NOTE: The project asked that districts provide names of graduates who are currently in business for themselves. Thus, the percentage of graduates who are in business for themselves is probably higher than what would be true for graduates in general.

Table 7: Have You Owned/Operated Own Business

	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Yes, Full-time	(25)	(24)	6% (49)	(50)	(17)	23% (67)	(63)	(24)	43% (87)
Yes, Part-time	(24)	(22)	9% (46)	(63)	(19)	28% (82)	(11)	(10)	10% (21)
No	(265)	(402)	88% (668)	(101)	(47)	49% (148)	(47)	(49)	47% (96)
TOTAL			(763)			(291)			(204)

Table 8 includes the mean response for students/graduates when they were asked to rate the amount of information they are learning or have learned about competencies useful for starting and operating a business. The table also provides the mean responses of instructors who were asked to rate the importance of various competencies for students who would be starting a business. Student and graduate responses were very similar for each of the ten competencies listed. The mean response rate for instructors was much higher for each of the ten competencies. The three competencies which were rated the lowest by both students and graduates were: marketing research, developing a business plan, and financing. These are perhaps several of the more important competencies required of individuals who are about to start their own business.

TABLE 8: Amount Of Information Learned About Competencies Useful For Starting and Operating Business (Mean = Total Group)

	Specific Technical Skills	Accounting and/or Bookkeeping Skills	Advertising, Selling, Marketing Skills	Marketing Research	Business Law	Developing a Business Plan	Financing	Customer Relations	Employee Relations	Practical Job Exper. Through Courses at School
STUDENT	3.36	2.68	2.71	2.45	2.50	2.27	2.16	3.25	3.30	3.51
GRADUATE	3.71	3.05	2.87	2.57	2.62	2.33	2.13	3.18	3.00	3.69
INSTRUCTOR	4.73	4.06	4.28	4.02	3.72	4.37	4.38	4.56	4.45	4.36

STUDENTS/GRADUATES:

KEY: 5 = VERY MUCH = MUCH INFORMATION PROVIDED IN 3 OR MORE CLASSES.
4 = MUCH = MUCH INFORMATION PROVIDED IN 1-2 CLASSES.
3 = SOME = SOME INFORMATION PROVIDED IN 1 OR MORE CLASSES.
2 = LITTLE = BEEN MADE AWARE OF THIS IN 1 OR MORE CLASSES.
1 = NONE = NO OPPORTUNITY TO LEARN ABOUT THIS IN ANY CLASSES.

INSTRUCTORS:

KEY: 5 = VERY MUCH = CRITICAL FOR STUDENTS TO LEARN MUCH ABOUT THIS.
4 = MUCH = IMPORTANT FOR STUDENTS TO LEARN ABOUT THIS.
3 = SOME = HELPFUL FOR STUDENTS TO LEARN SOME ABOUT THIS.
2 = LITTLE = STUDENTS SHOULD BE MADE AWARE OF THIS.
1 = NONE = DON'T BELIEVE STUDENTS NEED TO LEARN ABOUT THIS.

Table 9 indicates the findings when each of the three groups was asked to identify those competencies they believed they needed to learn more about in order to start and/or operate a business. A direct relationship exists between Table 8 and Table 9. Competencies which received a low rating on Table 8 received a high rating on Table 9. The six competencies on Table 9 which received the most responses from each of the three groups were: financing; developing a business plan; business law; marketing research; advertising, selling, and marketing skills; and, accounting and/or bookkeeping skills.

TABLE 9: Competencies You Need To Learn More About (Total N by %)

	Specific Technical Skills	Accounting and/or Bookkeeping Skills	Advertising, Selling, Marketing Skills	Marketing Research	Business Law	Developing a Business Plan	Financing	Customer Relations	Employee Relations	Practical Job Exper. Through Courses at School
STUDENTS (N=763)	26%	39%	36%	39%	40%	44%	50%	22%	19%	24%
GRADUATES (N=204)	21%	37%	39%	36%	43%	48%	49%	18%	21%	15%
INSTRUCTORS (N=283)	17%	33%	42%	47%	45%	42%	45%	17%	18%	10%

Table 10 shows the methods of instruction that students would prefer if they were to learn more about the competencies listed in Table 9. Students preferred three methods: daytime courses (51%); evening courses (50%); and, workshops/seminars (42%). Students do not want weekend courses (13%) nor television courses (16%).

Table 10: How Students Would Learn More About Competencies Listed In Table 9 (N)

Method	Male	Female	Total
Daytime Courses	47% (149)	54% (243)	51% (392)
Evening Courses	56% (175)	46% (204)	50% (380)
Weekend Courses	12% (38)	13% (60)	13% (98)
Workshops/Seminars	37% (116)	47% (208)	42% (324)
Television Courses	17% (52)	16% (73)	16% (125)
Other	4% (13)	3% (12)	3% (25)

Table 11 provides information on the numbers of former students who have contacted instructors for technical assistance in starting and/or operating their own business. Over one-half (55%) of the instructors indicated that they have been contacted by former students, asking them for technical assistance.

Table 11: Do Former Students Who Have Started Their Own Business Contact Instructors For Technical Assistance (N)

	Male	Female	Total
Yes	59% (116)	47% (40)	55% (156)
No	37% (74)	48% (41)	41% (115)

Table 12 indicates the responses of students when they were asked if they had any ideas about products/services that could be turned into a business. Almost one-half (48%) of the students responded "Yes, I have an idea". Another 24% stated they had "no idea yet, but I am thinking about it". Only 28% responded "no, I have no idea".

Table 12: Ideas About Products/Services That Could Be Turned Into A Business (N)

Response	Male	Female	Total
Yes, I have an Idea	53% (168)	43% (194)	48% (363)
No idea yet, but thinking about it	24% (77)	24% (106)	24% (183)
No, I have no idea	22% (69)	33% (146)	28% (215)

Table 13 indicates that 68% of students and 69% of graduates are aware of courses which would be helpful to starting and/or operating a business. But, when asked if they would be taking any of these courses (Table 14) before completing their programs, only 32% of the students responded "yes". This compares to 42% of graduates who responded "yes". NOTE: Since the project surveyed graduates who are in business for themselves, it is reasonable that most of them would take courses helpful to starting a business.

Table 13: Aware of Courses Helpful To Starting Business (N)

	Male	Female	Total
Yes			
Student	35% (219)	66% (297)	68% (517)
Graduate	36% (81)	71% (59)	69% (140)
No			
Student	30% (96)	32% (145)	32% (241)
Graduate	31% (38)	29% (42)	30% (62)

Table 14: Taking Any Of These Courses (Table 13) Before Completing Program (N)

	Male		Female		Total	
Yes						
Student	35%	(109)	29%	(131)	32%	(141)
Graduate	36%	(44)	49%	(41)	42%	(85)
No						
Student	40%	(127)	43%	(192)	42%	(319)
Graduate	61%	(74)	48%	(40)	56%	(114)

Several of the questions on each of the three surveys allowed space for the respondents to write in additional comments. These comments have been compiled for each of the surveys and can be found in Appendix H. Comments have been reported as they appeared on the surveys, with no interpretation. Likewise, no comments have been reported in the text of this chapter so as not to single out only popular responses.

Chapter 5

Conclusions and Recommendations of the Study

Conclusions

Overall, there is an indication that students, instructors and graduates are interested in the entrepreneurship as it pertains to starting and/or operating a business. The analysis of information from the three surveys substantiates the importance of VTAE districts to provide ongoing training for competencies generally required of individuals interested in owning their own business. Following are the more important conclusions which were drawn from the analysis of survey data and the recommendations to the Wisconsin State Board for VTAE concerning the conclusions. The different analyses have provided an abundance of statistical information which may be important to the needs of the reader/user of the data:

1. Instructors agreed with students and graduates that they have taken a rather middle-of-the-road view of the subject area of entrepreneurship by neither encouraging nor discouraging students from considering starting and/or operating a business. Instructors are aware of competencies that are important to individuals going into business for themselves. However, they may be hesitant to teach them. This may be due in part to the notion that the instructors realize they, themselves, need to learn more about the competencies important to starting and/or operating a business if they are to teach them to students. As a result, they have chosen to say nothing positive nor negative to students about the alternative of going into business for themselves.
2. VTAE districts have considerable staff expertise for teaching entrepreneurship. More than 50% of the instructors surveyed had owned

their own businesses. Also, the districts have staff members who teach finance, business management, planning, and marketing.

3. Three methods of instruction were preferred by in-school students interested in learning more about competencies related to starting and/or operating a business. These three methods were: daytime course instruction; evening course instruction; and, workshops/ seminars. Weekend and television course instruction were not viable options to respondents. When planning courses related to entrepreneurship, districts should consider offering courses during the day or evening during the week and/or offering workshops/seminars. For individuals not currently enrolled in school, evening courses and workshops/ seminars appear to be the best means of instruction.
4. Some, if not all, VTAE districts have offered workshops/seminars on entrepreneurship to individuals within their district. Reports from district staff indicate that there has been overwhelming response to participation in these workshops.
5. A large proportion (48%) of the students surveyed had ideas that they thought could be turned into enterprises.
6. Some VTAE programs naturally contained content on the competencies needed to be a successful entrepreneur. For example, marketing and agribusiness programs include many of those concepts. On the other hand, T & I programs usually contain little entrepreneurship content.
7. VTAE staff members have considerable expertise and experience with entrepreneurship, with 51% having owned or operated their own businesses.

Recommendations

The following recommendations are made based on the data collected in the interviews and from the surveys:

1. Results of the surveys appear to indicate that additional workshops can be provided to present information related to the competencies that survey respondents stated as being important to starting a business and which they stated they needed to learn more about. For example, a sequence (or series) of workshops can be conducted: Workshop 1 "Overview of Entrepreneurship and what is involved in starting a business"; Workshop 2 "Deciding on a business"; Workshop 3 "Developing a business plan"; Workshop 4 "Marketing Research"; Workshop 5 "Financing/Insurance and Liability for the business"; Workshop 6 "Operating the business: accounting and/or bookkeeping skills, customer and employee relations, business law, and, advertising, selling and marketing skills. Individuals attending the workshops could form a support networking group, each providing technical assistance to one another as they pursue their endeavors to start their own businesses. A support group of instructors from the district could provide technical assistance to these individuals on a need basis. Instructors would realize benefits from this involvement as well as the individuals they are assisting. They can share the information they learn in this process to students enrolled in their classes and who may or may not be considering starting their own businesses.
2. VTAE programs should provide more information on entrepreneurship to their students. This is especially true of programs in the T & I area. Because of the relatively high cost of starting a firm in one of the T & I fields, many teachers do not include much information on

entrepreneurship. However, most manufacturing companies are based on expertise and technology from one or more T & I areas. Also, T & I teachers need to present low cost/low risk ways to start a business in their field.

3. VTAE districts should provide their students with access to activities, services and people who can help these students assess the potential and feasibility of their entrepreneurial ideas.
4. Students in VTAE programs should receive more information on incubators and technical assistance available to entrepreneurs.
5. Successful entrepreneurs should be scheduled to speak to and interact with VTAE students. For example, this could be accomplished through field trips, visiting speakers, student organization activities, and internships.
6. The district's distance learning capabilities, up-down links, interactive video, etc. should be used to expose students and district residents to entrepreneurs and entrepreneurial education.
7. Continue to inform district residents of their course work and technical assistance available to entrepreneurs.
8. Provide workshops and courses for graduates and district residents who need to expand their entrepreneurial competencies.
9. VTAE districts should periodically survey their graduates to determine their entrepreneurial activities and needs.

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APPENDIX A

Information: 88-70

Wisconsin Board of Vocational Technical and Adult Education

VTAE

Vital To America's Economy

Information

Date: December 23, 1987

Subject: UW-Stout Entrepreneurship Project

Contact: Merle W. Bodine, Bureau Director, (608)266-2302

Distribution: VTAE District Directors
Instructional Services Administrators
Adult & Continuing Education Administrators
Economic Development Coordinators/Directors
Research & Planning Administrators
Information Distribution List

The Wisconsin Board of VTAE has funded the Center for VTAE at UW-Stout to conduct an entrepreneurship project. The goal of the project is to identify the impact of VTAE experiences on entrepreneurship competencies as well as to determine the types of services and technical assistance VTAE districts could provide for entrepreneurs. The purpose of the project is to identify the characteristics and experiences related to VTAE programs that encourage and/or inhibit entrepreneurship competencies. The project will also identify the types of competencies and services that entrepreneurs need in order to develop a successful enterprise.

This is a timely and important project; therefore, I would ask each VTAE district to assist UW-Stout with the successful completion of the objectives for the project. During the next several months, staff at the Center for VTAE will be sending surveys to each VTAE district for completion. They will be explaining the process for the completion of the surveys. Please assist them with this process as the entire VTAE system will benefit. Also, they will be contacting four of the VTAE districts to schedule dates where a small sample of students and staff will be interviewed. The information they obtain from the interviews will be used to design the survey instruments. If you are contacted to be one of the interview sites, I hope you will assist them with this endeavor. The interviewing will be completed within a day or so, and will not consume much of the participants' time.

Thank you for the support that you can give to the UW-Stout staff as well as to WBVTAE regarding this project.

Robert P. Sorensen

Robert P. Sorensen, Ph.D.
State Director

RPS/MWB/pr

310 Price Place P.O. Box 7874 Madison, WI 53707 608-266-1207

Entrepreneurship Advisory Committee Meeting

December 10, 1987
9:30 a.m. - 3:00 p.m.
Holiday Inn
US 51 & North Point Drive
Stevens Point

AGENDA

1. Welcome and Introductions
2. Review of project purpose and design
3. Discussion on Entrepreneurship
   * Competencies
   * Factors that may encourage entrepreneurs
   * Factors that may discourage entrepreneurs
4. Selection of interview sites
5. Other topics of interest
6. Set next advisory committee meeting date
7. Complete travel reimbursement forms
8. Adjourn

*Coffee and rolls will be available at 9:30 a.m.

*We will break for lunch in the Holiday Inn

WBVTAE ENTREPRENEURSHIP ADVISORY COMMITTEE MEETING: December 10, 1987

The first advisory committee meeting was held in Stevens Point, Wisconsin at the Holiday Inn. Committee members in attendance included: Orville Nelson, Alan Gilbertson, William Neverdahl, Merle Bodine, Ron Danowski, and Harland Kirchner. Those members unable to attend included: Merlin Gentz, Max Farning and James Urness.

Orv Nelson presented an overview of the project, including information on the goals and purpose of the project. The objectives of the project were also discussed.

The majority of the remainder of the meeting then focussed on the competencies that entrepreneurs appear to possess, the problems that VTAEs may have in the education of individuals who may be interested in becoming entrepreneurs, and questions that we may want to consider asking staff and students during the interviews that will take place at the VTAE schools that are selected.

The following, then, is a summary of the discussions that took place during the meeting.

There is the need for instructors who are enthusiastic about business. A question on this should be included on the survey.

Successful programs have incorporated mentoring programs, i.e. co-op type program.

It is more fun talking to people outside of the vocational education system about the incubator projects.

PICs (JTPA programs) want to provide entrepreneurship to their client groups.

DOL has funded several entrepreneurship type projects for unemployed people.

Ohio and South Carolina have both funded a technology transfer process.

Need to build Quality into the enterprise. It was pointed out that quality was a #1 goal for entrepreneurship in Italy.

Low capital intensive businesses - there are some - but people need to realize there are different types of capital - human capital, machines, cash for daily expenses, etc.

Instead of desire for profit, use the phrase "wealth creation".

Entrepreneurs need evaluation skillls to systemmatically evaluate progress.

It was noted that a student at FVTC was encouraged by an instructor in marketing course to look at a store that was for sale. She bought it and it has been very successful.

It was noted that a person must be patient. This is an inherent characteristic, but, some learned factors could impact this.

We need to ask students about their knowledge of business development and international marketplace.

The WBVTAE is working on a resource manual. Illinois has one of these now.

It was noted that special attention is given to Farmers by Illinois Community College.

Technology transfer should come from the University through the technical colleges and then be passed on to the students. It was noted that this was successfully done with agriculture and should now be done with T & I.

In a Bureau Of STDS report, the speaker noted the technology that was being created would be beneficial and available to ma and pa businesses. It was noted that the Smith Hughes model, a bill has been introduced to provide a technology transfer agent similar to the county agent. Technical colleges have a role to play in this area. Also, need to provide assistance with participation in the world economy. The world economy is very important.

The blood and guts of technical schools is manufacturing. Need to focus on T & I areas.

It was pointed out that an economic development report is being completed. Public service (fire, police, etc.) had the most contracts. T & I was second.

There was a concern that the PIC is focusing on the wrong things. Not enough money for job creation. There is the need for more money for job creation. The Carolinas will provide technical training to companies that want to move in to their state. Carolina techncial colleges just send the bill for the training to the state.

We need to look at what is best for the state when we try to develop entrepreneurs, i.e. emphasize manufacturing jobs, etc.

It was mentioned that many people feel that VTAE Colleges should not be involved in incubators.

Wausau (NCTC) will have a laser oriented mall.

"Halfway Home and A Long Way To Go" is a document on the South (13 states ?). It includes a discussion on how the South has lured old smoke stack industries from the north and that they have not really helped their economy. The document is not for release to others outside of the area and is not publicized. The document emphasizes the economic development in their educational programs.

Comment: We need to move in Human Resource Development directions. We all need to work together on this (Universities, VTAEs, government agencies, etc.).

JTPA is looking more at the long-term development of people.

Suggested: Ask Bob Martin (FVTC) for entrepreneurship survey which was done at FVTC about 2 years ago.

Barriers to Entrepreneurship: Women have special barriers to entrepreneurship. Merle Bodine shared a paper with us on barriers for women.

It was suggested that the survey include a question on: will staff and students be able to answer these questions? Will they have the knowledge to answer the questions?

We should also interview entrepreneurs who were not successful after a 1-3 year period to time. We need to also interview graduates and business people.

Question: How many entrepreneurs did FVTC truck driving school create?

Statement: Agriculture programs are geared to Entrepreneurship.

Statement: Be sure to look at T & I vs. Service.

Ask staff what competencies they need to develop. Also, ask to interview teachers who are teaching entrepreneurship courses.

Several of the committee members stated that they would take the questions we had prepared back to other individuals with whom they worked and have them review the questions and offer suggestions for what else could be asked.

Statement: there are findings that suggest that negative factors encourage entrepreneurship, i.e., sense of job losses, bad job experiences, etc.

Texas is working on incubators.

Statement: It would be nice if community colleges would list their exemplary programs in Entrepreneurhsip.

Triton (North Chicago) is doing some good things.

Bowing Green is doing entrepreneurship training. (Uses a mentoring process).

Venture Fair is conducted by UW-Madison. students present proposals to venture capitalists.

Interview sites were proposed to the committee members. Schools which will be contacted to determine if staff and students can be interviewed include: FVTC, CVTC, WWTC, MATC-Milwaukee. A contact person within each school will be established and we will work with that person to set interview dates as well as individuals who will be interviewed.

The next advisory committee meeting was set for February 23, 1988. The location of the meeting will be FVTC. A reminder letter will be sent to advisory committee members at a later date.

APPENDIX B2

CVTAE
CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

ENTREPRENEURSHIP ADVISORY COMMITTEE MEETING

February 23, 1988
10:00 am - 2:30 pm
Bordini Center
Fox Valley Technical College
Appleton, WI

AGENDA:

1. Welcome/overview of purpose of meeting.
2. Review of minutes from December 10, 1987 meeting.
3. Quick review of project purpose and objectives.
4. Summary of activities of project since December 10, 1987.
   * site visits for interviewing.
5. Review and comments on student survey. Additions, deletions, changes.
6. Review and comments on staff survey. Additions, deletions, changes.
7. Review and comments on graduate survey. Additions, deletions, changes.
8. Comments on future activities/timelines.
9. Travel expense forms completed for anyone eligible.
10. Schedule next meeting to discuss results of surveys.

*Lunch will be provided to us in the Bordini Center.

UNIVERSITY OF WISCONSIN-STOUT IS AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION UNIVERSITY.

APPENDIX C1

VTAE District you are now attending: _____

Program you are enrolled in: _____

1. Length of your Program (check one):
   - (1) _____ Less than 1 year vocational diploma
   - (2) _____ 1 year vocational diploma
   - (3) _____ 2 year vocational diploma
   - (4) _____ 2 year associate degree
   - (5) _____ Other type/length of program

   Describe: _____

2. What year are you in regarding your Program?
   - (1) _____ 1st year
   - (2) _____ 2nd year

3. Are you:
   - (1) _____ Part-time student
   - (2) _____ Full-time student

We are conducting a study for the Wisconsin Board of Vocational, Technical and Adult Education on people who may or may not be in the process of starting and owning a business. A business owner is "an individual who undertakes all the risks related to starting, owning and operating a small business, whether it is a new or existing business. This involves performing all business functions associated with a product or service and includes social and legal responsibilities." The purpose of this study is to identify the characteristics and factors that encourage and/or discourage individuals in becoming business owners. We are interested in your knowledge and background in obtaining information on starting and owning a business from the courses and programs that you are involved with at your school. This information will be used to assist the VTAE schools in developing competencies, courses and/or programs which will improve education on business ownership and start-ups, thus better preparing students to succeed in their own businesses. Your responses will be kept confidential.

---

4. I am:
   - (1) _____ Male
   - (2) _____ Female

5. Age:
   - (1) _____ 20 or younger
   - (2) _____ 21-24
   - (3) _____ 25-34
   - (4) _____ 35-44
   - (5) _____ 45-54
   - (6) _____ 55-64
   - (7) _____ 65 or older

6. Have you ever owned and operated you own business?
   - (1) _____ Yes, full-time
   - (2) _____ Yes, part-time
   - (3) _____ No

7. Do you currently own and operate your own business?
   - (1) _____ Yes, full-time
   - (2) _____ Yes, part-time
   - (3) _____ No

8. Are you thinking about starting a business?
   - (1) _____ Yes (go to item #9)
   - (2) _____ Not sure (go to item #10)
   - (3) _____ No (go to item #10)

9. If you answered yes to item #8, when?
   - (1) _____ This year, prior to completing my program.
   - (2) _____ As soon as I complete my program.
   - (3) _____ Within 1 year after completing my program.
   - (4) _____ 2-3 years after completing my program.
   - (5) _____ More than 3 years after completing my program.

10. Do your instructors encourage you to start your own business?
    - (1) _____ Yes, they provide extensive encouragement to me.
    - (2) _____ Yes, they provide some encouragement to me.
    - (3) _____ They have neither encouraged nor discouraged me.
    - (4) _____ They have tended to discourage me.
    - (5) _____ They have consistently discouraged me.

11. Do you have any ideas about products or services that could be turned into a business?
    - (1) _____ Yes, I have an idea about a product or service.
    - (2) _____ I have no idea yet; however, I am thinking about it.
    - (3) _____ No, I do not have any idea for a product or service nor am I thinking about it.

12. Are you aware of courses at school that would be helpful to you if you would start/own a business?
    - (1) _____ Yes (Go to item #13)
    - (2) _____ No (Go to item #15)

13. Are you planning on taking any of these courses before you complete your program?
    - (1) _____ Yes
    - (2) _____ No

14. If you answered no to item #13, why? (If you answered yes, skip this question and go to item #15)
    - (1) _____ I am not interested in taking these courses.
    - (2) _____ There is no room in my program to allow me to register for one or more of these types of courses.
    - (3) _____ Other (list: _____)

...over please...

CVTAE/UW-Stout
7308.A2

Directions: Several competencies you can learn about in school, which would be of benefit to you when you would start a business, are listed below. Read each one and rate the amount of information you are learning about it in school. Use the following answers:

Answers: 5 = VM = Very Much = I have had a specific course(s) in this or the information has been provided to me in 3 or more of my classes.

4 = M = Much = I have learned much about this in one or more of my classes.

3 = S = Some = I have learned some information about this in one or more of my classes.

2 = L = Little = I have been made aware of this in one or more of my classes.

1 = N = None = I have not had the opportunity to learn about this in any of my classes. I am not sure what this area is about.

Competency	Amount of Learning VM 5	M 4	S 3	L 2	N 1	
15. Specific technical skills related to the type of business I would be interested in starting	5	4	3	2	1	[25-34] (___)
16. Accounting and/or bookkeeping skills	5	4	3	2	1	(___)
17. Advertising, selling and/or marketing skills	5	4	3	2	1	(___)
18. Marketing research (establishing extent and location of a market, analyzing costs of products/processes)	5	4	3	2	1	(___)
19. Business Law (laws & regulations that affect business)	5	4	3	2	1	(___)
20. Developing a business plan	5	4	3	2	1	(___)
21. Financing (how to obtain money to start and operate a business)	5	4	3	2	1	(___)
22. Customer relations	5	4	3	2	1	(___)
23. Employee relations	5	4	3	2	1	(___)
24. Practical job experiences provided through courses at school (work experiences, labs, etc.)	5	4	3	2	1	(___)

25-34. Which of the above competencies do you need to learn more about in order to start your own business? If you already own and operate a business, which competencies do you need to learn more about? Place a check mark (✓) in the space after each competency you feel you need to learn more about.

35. Are you now taking, or have you taken, any seminars, workshops, or courses outside of your program that would assist you in starting and operating your own business?

(1) _____ Yes

(2) _____ No

36. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you have taken while a student. Exact titles may vary from VTAE school to school. Check if you have had a course with similar content.

(1) _____ Small Business Management

(2) _____ Business Law

(3) _____ Finance

(4) _____ Accounting/Bookkeeping

(5) _____ Marketing

(6) _____ Advertising

(7) _____ Salesmanship

(8) _____ Business Communications

(9) _____ Economics

(10) _____ Other related courses

Identify: _____

_____

37. If you were to learn more about the competencies listed in items #15-24, how would you do so? (check all that apply)

(1) _____ Daytime courses

(2) _____ Evening courses

(3) _____ Weekend courses

(4) _____ Workshops and/or seminars

(5) _____ Television courses

(6) _____ Other (Describe: _____)

38. Are you an active member in any student organization related to your program?

(1) _____ Yes (Go to item #39)

(2) _____ No (Go to item #40)

39. Which of the following are activities of your student organization? (check all that apply)

(1) _____ We take tours of businesses.

(2) _____ We invite business owners to give presentations on what they do.

(3) _____ We organize seminars/workshops that would encourage people to start/operate a business.

40. What other competencies do you feel are important for you to have in order to start a business?

_____

_____

Thank you for completing this survey.

VTAE District: _____

APPENDIX C2

Department: _____

We are conducting a study for the Wisconsin Board of Vocational, Technical and Adult Education on Entrepreneurship. What is an Entrepreneur? An Entrepreneur is "an individual who undertakes all the risks related to starting and operating a small business. This involves performing all business functions associated with a product or service and includes social and legal responsibilities." The purpose of this study is to identify the characteristics and factors that encourage and/or discourage individuals in becoming entrepreneurs. We are interested in your knowledge and background on entrepreneurship and whether the courses you instruct provide you with the opportunity to discuss characteristics/factors necessary for starting a business with your students. Information from this survey will be used to assist VTAE schools in developing competencies, courses and/or programs which will improve education on entrepreneurship, thus better preparing students to succeed in their own businesses. Your responses will be kept confidential.

1. I am: (1) _____ Male
   (2) _____ Female

2. Age: (1) _____ 24 or younger
   (2) _____ 25-34
   (3) _____ 35-44
   (4) _____ 45-54
   (5) _____ 55-64
   (6) _____ 65 or older

3. Are you:
   (1) _____ Employed less than one-half time.
   (2) _____ Employed one-half time or more.

4. Have you ever owned and operated your own business?
   (1) _____ Yes, full-time
   (2) _____ Yes, part-time
   (3) _____ No

5. Are you thinking about starting a business?
   (1) _____ Yes (go to item #6)
   (2) _____ No (go to item #7)

6. When do you plan to start a business?
   (1) _____ Within one year.
   (2) _____ Later than one year from now.

7. Do you encourage students to start their own businesses?
   (1) _____ Yes, I provide extensive encouragement to them.
   (2) _____ Yes, I provide some encouragement to them.
   (3) _____ I neither encourage nor discourage them.
   (4) _____ I tend to discourage them.
   (5) _____ I consistently discourage them.

8. If you have owned and operated your own business or consulting firm, do you share information with your students about your business experiences?
   (1) _____ Yes, I frequently share information with them.
   (2) _____ Yes, I occassionally share information with them.
   (3) _____ No, I do not share information with them.

9. Do you present alternative ways students can enter into their own businesses with minimal costs? (i.e.Catering food vs. owning a restaurant business)
   (1) _____ Yes, I encourage them to look for ways to start their own businesses with minimal cost.
   (2) _____ I present alternatives but neither encourage nor discourage them.
   (3) _____ I do not present alternatives to them.

10. Does your community have a business incubator?
   (1) _____ Yes, and it is functioning.
   (2) _____ Yes, but it has not yet started operation.
   (3) _____ Not sure if there is a business incubator.
   (4) _____ No, there is no business incubator. (Go to item #12)

11. What types of assistance does your VTAE provide to the business incubator? (check all that apply)
   (1) _____ Staff members are consulted to provide technical assistance to the businesses contained in the incubator.
   (2) _____ Students complete co-op or work experience programs with the various businesses.
   (3) _____ Businesses bring their problems and concerns into the classroom so students/staff can work with them in finding solutions.
   (4) _____ I am not sure if the businesses in the incubator make use of the expertise of our school, students or staff members.

12. Within the courses that you teach, do you discuss the factors and competencies required of successful entrepreneurs?
   (1) _____ Yes, I provide students with much information.
   (2) _____ Yes, I provide students with some information.
   (3) _____ No, I do not provide information to students.

13. Within your school, have specific courses been developed on entrepreneurship?
   (1) _____ Yes
   (2) _____ Not sure
   (3) _____ No

14. Do former students who have started their own businesses contact you for technical assistance?
   (1) _____ Yes
   (2) _____ No

...over please...

15. Do you have students work with business entrepreneurs in work experience or co-op programs?

(1) _____ Yes

(2) _____ No

16. Within the courses you teach, do you study people who are entrepreneurs (the businesses they started, the reasons for their success, their backgrounds)?

(1) _____ Yes

(2) _____ No

Directions: Several competencies which would be of benefit to those who are starting or considering starting their own businesses are listed below. Read each statement and rate the amount of importance that the competency has for students who would be starting their own business. Use the following answers:

Answers: 5 = VM = Very Much = It is critical for students to learn as much as possible about this competency to start a business.

4 = M = Much = It is important for students to learn about this competency.

3 = S = Some = It is helpful for students to learn some about this competency.

2 = L = Little = Students should be made aware of this competency.

1 = N = None = I do not believe students need to learn about this competency.

Competency	Amount of Learning VM 5	M 4	S 3	L 2	N 1	[28-38]
17. Specific technical skills related to the type of business the students would be interested in starting	5	4	3	2	1	(___)
18. Accounting and/or bookkeeping skills	5	4	3	2	1	(___)
19. Advertising, selling and/or marketing skills	5	4	3	2	1	(___)
20. Marketing research (establishing extent and location of a market, analyzing costs of products/processes)	5	4	3	2	1	(___)
21. Business Law (laws & regulations that affect business)	5	4	3	2	1	(___)
22. Developing a business plan	5	4	3	2	1	(___)
23. Financing (how to obtain money to start and operate a business)	5	4	3	2	1	(___)
24. Customer relations	5	4	3	2	1	(___)
25. Employee relations	5	4	3	2	1	(___)
26. Practical job experiences provided through courses at school (work experiences, labs, etc.)	5	4	3	2	1	(___)
27. Other (Describe:_____)	5	4	3	2	1	(___)

28-38. Which of the above competencies do you need to learn more about in order to present information about entrepreneurship to your students? Place a check mark (✓) in the space after each competency above.

39. As an instructor, are you actively involved with any student organizations on campus?

(1) _____ Yes

(2) _____ No

Name of organizations:_____

_____

40. Within the courses you teach, which of the following are activities used by you? (check all that apply)

(1) _____ Speakers

(2) _____ Tours of business/industry

(3) _____ Seminars by business people

(4) _____ Co-op and work experience programs

(5) _____ Instructors from other areas

(6) _____ Other activities (Describe:_____

_____)

41. Do you try to include information on entrepreneurship in the activities listed in item #40?

(1) _____ Yes

(2) _____ No

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

_____

_____

_____

43. Do you have any other comments?

_____

_____

_____

Thank you for completing this survey.

APPENDIX C3

VTAE District you graduated from: _____

Program you completed: _____

When did you graduate? _____

We are conducting a study for the Wisconsin Board of Vocational, Technical and Adult Education on people who may or may not be in the process of starting and owning a business. A business owner is "an individual who undertakes all the risks related to starting, owning and operating a small business, whether it is a new or existing business. This involves performing all business functions associated with a product or service and includes social and legal responsibilities." The purpose of this study is to identify the characterisitics and factors that encourage and/or discourage individuals in becoming business owners. We are interested in your knowledge and background in obtaining information on starting and owning a business from the courses and programs that you completed while a student at your VTAE campus. This information will be used to assist the VTAE schools in developing competencies, courses and/or programs which will improve education on business ownership and start-ups, thus better preparing students to succeed in their own businesses. Your responses will be kept confidential.

1. Length of your program (check one):
   (1) _____ Less than 1 year vocational diploma
   (2) _____ 1 year vocational diploma
   (3) _____ 2 year vocational diploma
   (4) _____ 2 year associate degree
   (5) _____ Other type/length of program
   Describe: _____

2. I am:
   (1) _____ Male
   (2) _____ Female

3. Age:
   (1) _____ 20 or younger
   (2) _____ 21-24
   (3) _____ 25-34
   (4) _____ 35-44
   (5) _____ 45-54
   (6) _____ 55-64
   (7) _____ 65 or older

4. Have you ever owned and operated your own business?
   (1) _____ Yes, full-time (Go to item #5)
   (2) _____ Yes, part-time (Go to item #5)
   (3) _____ No (Go to item #7)

5. Do you currently own and operate your own business?
   (1) _____ Yes, full-time (Go to item #6)
   (2) _____ Yes, part-time (Go to item #6)
   (3) _____ No (Go to item #7)

6. When did you start your business?
   (1) _____ Prior to completing my program.
   (2) _____ As soon as I completed my program.
   (3) _____ Within 1 year after completing my program.
   (4) _____ 2-3 years after completing my program.
   (5) _____ More than 3 years after completing my program.

7. If you currently do not own and operate your own business, do you think you might start your own business?
   (1) _____ Yes, within 1 year.
   (2) _____ Yes, between 1-3 years from now.
   (3) _____ I am <u>not</u> thinking of starting a business.
   (4) _____ I already have my own business.

8. Did your VTAE instructors encourage you to start your own business?
   (1) _____ Yes, they provided extensive encouragement to me.
   (2) _____ Yes, they provided some encouragement to me.
   (3) _____ They neither encouraged nor discouraged me.
   (4) _____ They tended to discourage me.
   (5) _____ They consistently discouraged me.

9. While in school, were you aware of courses that would be helpful to you if you were to start a business?
   (1) _____ Yes
   (2) _____ No

10. Did you take any of these courses before you completed your program?
    (1) _____ Yes (Go to item #12)
    (2) _____ No (Go to item #11)

11. Why did you <u>not</u> take any of these courses?
    (1) _____ I was not interested in taking these courses.
    (2) _____ There was no room in my program to allow me to register for one or more of these types of courses.
    (3) _____ Other (Describe: _____)

...over please...

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school.

(1) _____ Small Business Management
(2) _____ Business Law
(3) _____ Finance
(4) _____ Marketing
(5) _____ Advertising
(6) _____ Economics
(7) _____ Business Communications
(8) _____ Accounting/Bookkeeping
(9) _____ Salesmanship
(10) _____ Other (Describe:_____
_____)

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business?

(1) _____ Yes (List:_____
_____)
(2) _____ No

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job?

(1) _____ Yes
(2) _____ No

What types of assistance have you requested of these teachers?
_____
_____

Directions: Several competencies you can learn about in school, which would be of benefit to individuals when they start a business, are listed below. Read each one and rate the amount of information you learned about it while a student. Use the following answers:

Answers: 5 = VM = Very Much = I had a specific course(s) in this or the information was provided to me in 3 or more of my classes.
4 = M = Much = I learned much about this in one or more of my classes.
3 = S = Some = I learned some information about this in one or more of my classes.
2 = L = Little = I was made aware of this in one or more of my classes.
1 = N = None = I did not have the opportunity to learn about this in any of my classes. I am not sure what this area is about.

Competency	Amount of Learning VM 5	M 4	S 3	L 2	N 1	
15. Specific technical skills related to the type of business I would be interested in starting	5	4	3	2	1	[25-34] (___)
16. Accounting and/or bookkeeping skills	5	4	3	2	1	(___)
17. Advertising, selling and/or marketing skills	5	4	3	2	1	(___)
18. Marketing research (establishing extent and location of a market, analyzing costs of products/processes)	5	4	3	2	1	(___)
19. Business Law (laws & regulations that affect business)	5	4	3	2	1	(___)
20. Developing a business plan	5	4	3	2	1	(___)
21. Financing (how to obtain money to start and operate a business)	5	4	3	2	1	(___)
22. Customer relations	5	4	3	2	1	(___)
23. Employee relations	5	4	3	2	1	(___)
24. Practical job experiences provided through courses at school (work experiences, labs, etc.)	5	4	3	2	1	(___)

25-34. Which of the above competencies do you need to learn more about in order to start your own business? If you already own and operate a business, which competencies do you need to learn more about? Place a check mark (✓) in the space after each competency that you feel you need to learn more about.

...go to next page...

CVTAE/UW-Stout
7310.A3

For each of the competencies listed below, rate the amount of information you now believe students should receive in order to be better prepared to start their own businesses. Base the ratings on your experiences since graduating from school. Use the following answers:

Answers: 5 = VM = Very Much = It is critical for students to learn as much as possible about this competency to start a business.

4 = M = Much = It is important for students to learn about this competency.

3 = S = Some = It is helpful for students to learn some about this competency.

2 = L = Little = Students should be made aware of this competency.

1 = N = None = I do not believe students need to learn about this competency.

Competency	Amount of Learning VM 5	M 4	S 3	L 2	N 1	Comments
35. Types of ownership (sole proprietorship, partnerships, corporations)	5	4	3	2	1	
36. Procedures for obtaining technical assistance	5	4	3	2	1	
37. Identifying businesses (type of business, market research, etc.)	5	4	3	2	1	
38. Locating your business (geographical area, building location, etc.)	5	4	3	2	1	
39. Protecting the business (insurance, employee theft, etc.)	5	4	3	2	1	
40. Marketing the business	5	4	3	2	1	
41. Taxation and the small business	5	4	3	2	1	
42. Managing human resources	5	4	3	2	1	
43. Short- and long-range planning	5	4	3	2	1	
44. Public and community relations	5	4	3	2	1	
45. Developing the preliminary business plan	5	4	3	2	1	
46. Financing for the business	5	4	3	2	1	
47. Surviving business crises	5	4	3	2	1	
48. Accounting and bookkeeping procedures for the business	5	4	3	2	1	
49. Types of business (retail, wholesale, service, cottage, manufacturing, franchise, etc.)	5	4	3	2	1	

50. Is there a business incubator in your community or local area? (A business incubator is a place where new businesses can get their start while receiving technical assistance, reduced rent, etc.)

(1) _____ Yes

(2) _____ Yes, but it has not yet started functioning.

(3) _____ Not sure if there is an incubator.

(4) _____ No, there is no incubator.

51. If you answered yes to item #50, have you ever had reason to contact the business incubator and determine if it could assist you with a new business venture?

(1) _____ Yes

(2) _____ No

52. While a student, were you actively involved with any student organization related to your program?

(1) _____ Yes

(2) _____ No

53. Are you, or have you ever been, a member of any professional organization that is related to the type of business or job you currently have?

(1) _____ Yes

(2) _____ No

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

_____

_____

_____

_____

Thank you for completing this survey. Please return the survey in the business reply envelope which has been provided.

APPENDIX D

CVTAE
CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382
February 5, 1988

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

The Center for Vocational, Technical and Adult Education at the University of Wisconsin - Stout is currently conducting a project on entrepreneurship funded by the Wisconsin Board of Vocational, Technical and Adult Education. We are in the process of developing our surveys and want to inform you of our upcoming procedures as well as obtaining your assistance with the project. The attached information bulletin from the State Board of VTAE provides an overview of the project.

We intend to survey four groups of people: current students, occupational teachers, graduates who currently consider themselves to be entrepreneurs, and graduates who are not entrepreneurs. We are interested in surveying people connected to your campus: 50 students (random); 30 occupational teachers (representative of all areas); 10 graduates who are entrepreneurs (if you are able to identify these individuals); and, 20 graduates who may or may not be considered entrepreneurs. If you are interested in surveying in-school students within each of your divisions, we could provide surveys for the surveying of approximately 25 students within each of the divisions. Please let us know how many surveys you would prefer.

As of this date, we are in the process of interviewing a sample of students and occupational teachers at four VTAE campuses. The information obtained from these interviews will be added to information we obtained while completing a review of the literature on entrepreneurship to develop the surveys. It is our intent to have the surveys designed and ready to be mailed to each of the VTAE districts by the middle of March. We would like to have each district administer the surveys and return them to our office within three weeks for data processing.

We can assist you in several ways regarding the surveying of graduates:

1. Your school could send the names and addresses of graduates and graduate entrepreneurs. We would assemble the survey letters, address, and mail them, or
2. We could assemble the survey letters and send them to your District for addressing and mailing.

We will develop a specific procedure that is appropriate for your District. A form is enclosed for you to identify a contact person for this study. We will discuss and develop the procedure to be used to administer the surveys with your contact person.

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After each of the VTAE districts has returned the surveys to us, we will data process the data. Each VTAE district will receive computer summaries of the data from the surveys returned by students and teachers from their district and will also obtain a copy of the composite data which includes surveys returned by all districts. Responses of individuals and from individual districts will be kept confidential. Only statewide summaries will be published.

If you have any questions regarding the purpose of this project or wish additional information, please feel free to contact Alan Gilbertson at (715) 232-1388 or Orv Nelson at (715) 232-1382. Thank you for your attention to this project.

Please identify your contact person and return the enclosed form as soon as convenient. We will contact this person to develop a functional method to handle the surveys in your school.

Sincerely,

Alan Gilbertson
Assistant Researcher

Orv Nelson
Co-Director Center for Vocational
Technical and Adult Education

VTAE Entrepreneurship Study

VTAE District: _____

The contact person for our school is:

(name) _____

(title) _____

(tel.#) _____

Please send us the following number of student surveys: _____

We prefer the following method for surveying our graduates:

1. We will send the names and addresses to you _____

2. We will send the information you provide to us _____

* If you need any further information or clarification on the above, please contact Alan Gilbertson at (715) 232-1388.

** Use the business reply envelope, or send the form to:

CVTAE
218 Applied Arts Bldg.
UW-Stout
Menomonie, WI 54751

APPENDIX E

CVTAE
CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

INSTRUCTIONS FOR ADMINISTERING THE STUDENT SURVEY FOR THE ENTREPRENEURSHIP STUDY

INSTRUCTORS

Thank you for allowing this survey to be administered to your students. We, at the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout, are fully aware that this is a very busy time of the school year and do appreciate your help. We are having randomly selected groups of students from all sixteen vocational districts complete this survey. Instructions for administering the surveys to students are as follows:

INSTRUCTIONS

Advise the students that the survey should take only ten minutes to complete. It is important that the student complete the first two lines (VTAE District now attending, and, Program currently enrolled in). These two items will serve as the basis for sorting the data.

Students should answer every item on the survey unless the item directs them to an item other than the one immediately following that item. Some of the items ask for multiple checks to be made; however, most items will have only one response.

After the students have answered items #15-24, item #25-34 instructs them to place a check mark in the space after each item (15-24) where they feel they need to learn more about it. The arrow (page 2) points to the area where the check marks are to be placed.

Explain that when comments or "write ins" are solicited, as in item #1,14,36,37, and, 40, they should feel free to use the margins as well as the space provided. Thank them for assisting us in this research project.

INSTRUCTORS

Thank you for assisting us by administering this survey. Please return the completed surveys and any that were not used to the individual giving you the surveys. Results of the study will be provided to your VTAE District along with composite data of all VTAE Districts in Wisconsin.

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UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

INSTRUCTIONS FOR ADMINISTERING THE INSTRUCTOR SURVEY FOR THE ENTREPRENEURSHIP PROJECT

INSTRUCTORS

Thank you for taking the time to complete this survey. We, at the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout, are fully aware that this is a very busy time of the school year and do appreciate your help. We are having randomly selected occupational teachers from all sixteen vocational districts complete this survey. Instructions for completing this survey are as follows:

INSTRUCTIONS

The survey should take only ten minutes to complete. It is important that you complete the first two lines (VTAE District, and, Department assigned to). These two items will serve as the basis for sorting the data on the surveys.

Please answer every item on the survey unless directed to go to an item other than the one immediately following that item. Some of the items do ask for multiple checks; however, most of the items will have only one response.

After you have answered items #17-27, item #28-38 instructs you to place a check mark in the space after each item (17-27) where you feel you need to learn more about it in order to present information to the students. The arrow (page 2) indicates the area where the check marks are to be placed.

When comments or "write ins" are solicited, as in item #39,40,42, and, 43, feel free to use the margins as well as the space provided.

Thank you, again, for completing the survey. Please return the completed survey to the individual giving you the survey. Results of the study will be provided to your VTAE District along with composite data of state-wide results.

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SAMPLE LETTER TO BE SENT TO GRADUATES

[VTAE District Letterhead]

[Date]

[Name]
[Address]
[Address]
[City, State, Zip]

Dear [Name]:

You have been selected to participate in a state-wide study of VTAE graduates. The Wisconsin Board for Vocational, Technical and Adult Education is conducting a study to determine the skills and knowledge VTAE graduates need to start and operate their own businesses. Your responses are very important to the study, even if you do not operate your own business. The information obtained from the survey results will be used to assist in revising and/or adding courses and programs at our school and at other VTAE District schools. Your name was selected to participate in this study. Similar surveys are being completed by students and instructors at our school. In addition, students, instructors and graduates of the other Technical Colleges in Wisconsin are participating in this study.

Please take a few minutes of your time to complete the enclosed survey. Since only 30 of our graduates will be receiving this survey, your completion and return of this survey is very important to our project. A stamped, addressed envelope has been included for you to return the survey to our office for data processing. Your responses will be kept confidential.

If you have any questions regarding the survey, please feel free to contact us.

Thank you for your participation.

Sincerely,

[Name]
[Title]

Enclosure

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CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

You have been selected to participate in a state-wide study of VTAE graduates. Our Center is conducting a study to determine the skills and knowledge VTAE graduates need to start and operate their own businesses. Your responses are very important to the study, even if you do not operate your own business. The information obtained from the survey results will be used to assist in revising and/or adding courses and programs at Gateway Technical College and other VTAE Districts. Your names was selected by GTC. Similar surveys are being completed by students and instructors at GTC. In addition, students, instructors and graduates of the other Technical Colleges in Wisconsin are participating in this study.

Please take a few minutes of your time to complete the enclosed survey. Since only 30 GTC graduates will be receiving this survey, your completion and return of this survey is very important to our project. A stamped, addressed envelope has been included for you to return the survey to our office for data processing. Your responses will be kept confidential.

If you have any questions regarding the survey, please feel free to contact us.

Thank you for your participation.

Sincerely,

Orville Nelson
Co-Director
Center for Vocational, Technical
and Adult Education

Alan Gilbertson
Assistant Researcher
Center for Vocational, Technical
and Adult Education

mw

Enclosure

UNIVERSITY OF WISCONSIN STOUT IS AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION UNIVERSITY

APPENDIX F

CVTAE
CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

April 6, 1988

Letter sent to: James Urness
Merle Bodine
Max Farning
Merlin Gentz
William Neverdahl
Ron Danowski
Harland Kirchner

Dear:

The date for our next WBVTAE Entrepreneurship Project Advisory Committee meeting is now set for May 4, 1988 in Wausau. We will be meeting from 11:30 a.m. to around 1:30 p.m. in the Holiday Inn. Several of our members are involved with the Stout Advisory Committee, and that group will be meeting at 2:00 p.m. in the Holiday Inn.

The purpose of this meeting will be to discuss the actual surveying of students, staff and graduates at each of the VTAE districts. We should have data results to share with you at the meeting.

We will plan to have lunch during the course of the meeting.

A business reply envelope has been provided for you to respond as to whether or not you will be able to make this meeting. Please let us know as soon as you can so arrangements can be made for the meal.

Thank you for the input you have provided to us to date. The Advisory Committee has been a tremendous asset to the purpose of the project. See you in Wausau.

Sincerely yours,

Alan Gilbertson
Assistant Researcher

Orville Nelson, Co-Director
Center for Vocational, Technical
and Adult Education

mw

Enclosure

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CENTER FOR VOCATIONAL TECHNICAL AND ADULT EDUCATION
715-232-1382

May 11, 1988

UNIVERSITY OF WISCONSIN
STOUT
MENOMONIE WISCONSIN 54751

An advisory committee meeting of the WBVTAE Entrepreneurship Project was held on May 4, 1988 at North Central Technical College, Wausau, Wisconsin. In attendance were: Merle Bodine, Jim Urness, Bill Neverdahl, Merlin Gentz, Howard Lee, and, Alan Gilbertson. Those unable to attend were: Max Farning, Ron Danowski, Harland Kirchner, and, Orv Nelson. The meeting was held from 11:30 am to 12:30 pm.

The purpose of the meeting was to share with the committee preliminary results of the survey data received to date. More complete results will be made available to the group when the remaining VTAE Districts have sent their data to the center. Data results were discussed on the Instructor, Student and Graduate Surveys. It was the opinion of the committee that there were some rather interesting findings from the survey composite data. The committee suggested that the final survey printouts be made available based on: sex of the respondent, program divisions the respondents were in, and the item which asked if the person has ever owned a business. Other printouts would be left to the discretion of the project staff.

In determining a date for the next advisory committee meeting, it was suggested that perhaps the meeting could be held during the Mid-America Conference, which will be held on June 6-8 at UW-Stout. A time of 4 pm on June 6 was tentatively set during the meeting. Most of the members in attendance said they could attend at this time. A memo will be sent to each committee member confirming this date. If it becomes difficult to make this meeting, another method discussed by the group was the possibility of conducting a meeting by conference telephone. The purpose of the next meeting will be to discuss recommendations of the findings. The committee will react to the recommendations, make changes and/or additions. The results and recommendations will then become part of the final report for the state board.

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APPENDIX G

STUDENT SURVEY RESULTS BASED ON THE SEX OF THE RESPONDENTS

A total of 763 in-school students at 15 of the VTAE Districts within Wisconsin completed the student survey for the Entrepreneurship Project.

	Item Statement	Total N %	Male N %	Female N %
(4)	Sex: Omit	1 0	- -	- -
	(1) Male	315 41	315 100	- -
	(2) Female	447 59	- -	447 100
(5)	Age: Omit	1 0	- -	1 0
	(1) 20 or younger	283 37	116 37	167 37
	(2) 21-24	181 24	94 30	87 19
	(3) 25-34	185 24	66 21	118 26
	(4) 35-44	86 11	32 10	54 12
	(5) 45-54	22 3	6 2	16 4
	(6) 55-64	3 0	1 0	2 0
	(7) 65 or older	2 0	- -	2 0

	Item Statement	Total N %	Male N %	Female N %
(Top of Page)	Program enrolled in: Omit			
	(1) Agribusiness			
	(2) Marketing Education			
	(3) Health Occupations			
	(4) Home Economics			
	(5) Business Education			
	(6) Trade & Industry			
	(7) Developmental Education			
	(8) General Education			
	(9) Other Programs			
(1)	Length of Program: Omit	6 1	3 1	3 1
	(1) Less than 1 year vocational diploma	13 2	2 1	11 2
	(2) 1 year vocational diploma	124 16	48 15	76 17
	(3) 2 year vocational diploma	101 13	54 17	47 11
	(4) 2 year associate degree	502 66	202 64	299 67
	(5) Other type/length of program	17 2	6 2	11 2
(2)	Year in Program: Omit	50 7	18 6	32 7
	(1) 1st year	382 50	151 48	230 51
	(2) 2nd year	331 43	146 46	185 41
(3)	Status: Omit	32 4	12 4	20 4
	(1) Part-time student	93 12	31 10	62 14
	(2) Full-time student	638 84	272 86	365 82

	Item Statement	Total N %	Male N %	Female N %
(6)	Have you ever owned and operated your own business?	1	1	-
	Omit	0	0	-
	(1) Yes, full-time	49 6	25 8	24 5
	(2) Yes, part-time	46 6	24 8	22 5
	(3) No	668 88	265 84	402 90
(7)	Do you currently own and operate your own business?	4	2	2
	Omit	1	1	0
	(1) Yes, full-time	14 2	6 2	8 2
	(2) Yes, part-time	29 4	20 6	9 2
	(3) No	716 94	287 91	428 96
(8)	Are you thinking about starting a business?	10	5	5
	Omit	1	2	1
	(1) Yes	201 26	111 35	89 20
	(2) Not sure	252 33	96 30	156 35
	(3) No	300 39	103 33	197 44
(9)	If you are thinking about starting a business, when?	554	202	352
	Omit	73	54	79
	(1) This year, prior to completing my program	23 3	16 5	7 2
	(2) As soon as I complete my program	10 1	7 2	3 1
	(3) Within 1 year after completing my program.....	31 4	15 5	16 4
	(4) 2-3 years after completing my program.....	62 8	32 10	29 6
	(5) More than 3 years after completing my program....	84 11	44 14	40 9
(11)	Do you have any ideas about products or services that could be turned into a business?			
	Omit	3 0	1 0	2 0
	(1) Yes, I have an idea about a product or service ..	363 48	168 53	194 43
	(2) I have no idea yet; however, I am thinking about it	183 24	77 24	106 24
	(3) No, I do not have any idea for a product or service nor am I thinking about it	215 28	69 22	146 33

	Item Statement	Total N %	Male N %	Female N %
(12)	Are you aware of courses at school that would be helpful to you if you would start/own a business?			
	Omit	5 1	- -	5 1
	(1) Yes	517 68	219 70	297 66
	(2) No	241 32	96 30	145 32
(13)	Are you planning on taking any of these courses before you complete your program?			
	Omit	203 27	79 25	124 28
	(1) Yes	241 32	109 35	131 29
	(2) No	319 42	127 40	192 43
(14)	If you answered no to the above question, why are you not taking these courses?			
	Omit	451 59	183 58	267 60
	(1) I am not interested in taking these courses	111 15	48 15	63 14
	(2) There is no room in my program to allow me to register for 1 or more of these types of courses.	109 14	47 15	62 14
	(3) Other	97 13	40 13	57 13
(10)	Do your instructors encourage you to start your own business?			
	Omit	7 1	4 1	3 1
	(1) Yes, they provide extensive encouragement to me .	50 7	19 6	31 7
	(2) Yes, they provide some encouragement to me	143 19	59 19	84 19
	(3) They have neither encouraged or discouraged me ..	552 72	228 72	323 72
	(4) They have tended to discourage me	8 1	3 1	5 1
	(5) They have consistently discouraged me	3 0	2 1	1 0

Competency	Total Mean StD	Male Mean StD	Female Mean StD
(15-24) Rate the amount of information you are learning about each of the following competencies in school.			
(1) Specific technical skills related to the type of business I would be interested in starting ...	3.36 1.34	3.50 1.27	3.26 1.38
(2) Accounting and/or bookkeeping skills	2.68 1.35	2.29 1.26	2.96 1.34
(3) Advertising, selling and/or marketing skills	2.71 1.40	2.57 1.41	2.80 1.38
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	2.45 1.31	2.37 1.30	2.50 1.32
(5) Business Law (laws & regulations that affect business)	2.50 1.38	2.26 1.31	2.67 1.41
(6) Developing a business plan	2.27 1.26	2.26 1.25	2.28 1.26
(7) Financing (how to obtain money to start and operate a business)	2.16 1.23	2.07 1.22	2.22 1.23
(8) Customer relations	3.25 1.33	3.13 1.29	3.35 1.35
(9) Employee relations	3.30 1.30	3.20 1.26	3.36 1.33
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).	3.51 1.40	3.55 1.35	3.48 1.44

Scale:
- 5 = Very Much = I have had a specific course(s) in this or the information has been provided to me in 3 or more of my classes.
- 4 = Much = I have learned much about this in one or more of my classes.
- 3 = Some = I have learned some information about this in one or more of my classes.
- 2 = Little = I have been made aware of this in one or more of my classes.
- 1 = None = I have not had the opportunity to learn about this in any of my classes. I am not sure what this area is about.

	Item Statement	Total N %	Male N %	Female N %
(25-34)	Which of the following competencies do you need to learn more about in order to start your own business?			
	(1) Specific technical skills related to the type of business I would be interested in starting ...	197 26	77 24	120 27
	(2) Accounting and/or bookkeeping	300 39	141 45	159 36
	(3) Advertising, selling and/or marketing skills	278 36	128 41	150 34
	(4) Marketing research	300 39	133 42	166 37
	(5) Business Law	302 40	140 44	162 36
	(6) Developing a business plan	336 44	135 43	200 45
	(7) Financing	380 50	165 52	215 48
	(8) Customer relations	166 22	80 25	89 19
	(9) Employee relations	146 19	70 22	76 17
	(10) Practical job experiences provided through courses at school	182 24	82 26	100 22
(37)	If you were to learn more about the above competencies, how would you do so?			
	Omit	34 4	13 4	21 5
	(1) Daytime courses	392 51	149 47	243 54
	(2) Evening courses	380 50	175 56	204 46
	(3) Weekend courses	98 13	38 12	60 13
	(4) Workshops and/or seminars	324 42	116 37	208 47
	(5) Television courses	125 16	52 17	73 16
	(6) Other	25 3	13 4	12 3

	Item Statement	Total N %	Male N %	Female N %
(36)	Which of the following courses have you taken while a student at your school?			
	Omit	127 17	59 19	68 15
	(1) Small Business Management	148 19	61 19	87 19
	(2) Business Law	232 30	76 24	155 35
	(3) Finance	81 11	35 11	46 10
	(4) Accounting/Bookkeeping	320 42	95 30	224 50
	(5) Marketing	232 30	92 29	140 31
	(6) Advertising	192 25	73 23	119 27
	(7) Salesmanship	210 28	78 25	131 29
	(8) Business Communications	330 43	121 38	209 47
	(9) Economics	420 55	171 54	249 56
(35)	Are you now taking, or have you taken, any seminars, workshops, or courses outside of your program that would assist you in starting/operating your own business?			
	Omit	15 2	4 1	11 2
	(1) Yes	182 24	87 28	94 21
	(2) No	566 74	224 71	342 77
(38)	Are you an active member in any student organization related to your program?			
	Omit	11 1	3 1	8 2
	(1) Yes	252 33	109 35	143 32
	(2) No	500 66	203 64	296 66
(39)	If you are in a student organization, which of the following are activities of your organization?	519 68	205 65	313 70
	Omit			
	(1) We take tours of businesses	168 22	80 25	88 20
	(2) We invite business owners to give presentations on what they do	144 19	61 19	83 19
	(3) We organize seminars/workshops that would encourage people to start/operate a business	58 8	24 8	34 8

STUDENT SURVEY RESULTS BASED ON THE PROGRAM AREA OF THE RESPONDENTS

A total of 763 students at 15 of the VTAE Districts within Wisconsin - completed the student survey for the Entrepreneurship Project.

	ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OF
		N	N	N	N	N	N	N	N	N
		%	%	%	%	%	%	%	%	%
(4)	Sex: Omit.....	-	-	-	-	1	-			
		-	-	-	-	1	-			
	(1) Male.....	21	64	10	8	36	169			
		70	35	21	8	20	82			
	(2) Female.....	9	120	37	93	143	38			
		30	65	79	92	79	18			
(5)	Age: Omit.....	-	-	-	-	1	-			
		-	-	-	-	1	-			
	(1) 20 or younger.....	14	72	7	52	54	81			
		47	39	15	51	30	39			
	(2) 21-24.....	3	60	9	13	39	51			
		10	33	19	13	22	25			
	(3) 25-34.....	8	31	19	20	53	50			
		27	17	40	20	29	24			
	(4) 35-44.....	3	18	11	11	26	16			
		10	10	23	11	14	8			
	(5) 45-54.....	1	1	1	4	7	8			
		3	1	2	4	4	4			
	(6) 55-64.....	-	1	-	1	-	1			
		-	1	-	1	-	0			
	(7) 65 or older.....	1	1	-	-	-	-			
		3	1	-	-	-	-			
(Top of Page)	Program completed: Omit.....	-	-	-	-	1	-			
	(1) Agribusiness.....	30	-	-	-	-	-			
	(2) Marketing Education.....	-	184	-	-	-	-			
	(3) Health Occupations.....	-	-	47	-	-	-			
	(4) Home Economics.....	-	-	-	101	-	-			
	(5) Business Education.....	-	-	-	-	179	-			
	(6) Trade & Industry.....	-	-	-	-	-	207			
	(7) Developmental Education.....	-	-	-	-	-	-			
	(8) General Education.....	-	-	-	-	-	-			
	(9) Other Programs.....	-	-	-	-	-	-			
(1)	Length of your program: Omit.....	-	1	1	-	-	2			
		-	1	2	-	-	1			
	(1) Less than 1 year vocational diploma.....	1	-	4	5	-	2			
		3	-	9	5	-	1			
	(2) 1 year vocational diploma.....	12	10	3	36	21	42			
		40	5	6	36	12	20			
	(3) 2 year vocational diploma.....	8	22	6	8	18	38			
		27	12	13	8	10	18			
	(4) 2 year associate degree.....	9	148	33	50	138	116			
		30	80	70	50	77	56			
	(5) Other type/length of program.....	-	3	-	2	3	7			
		-	2	-	2	2	3			

	ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
		N	N	N	N	N	N	N	N	N
		%	%	%	%	%	%	%	%	%
(2)	Year in Program: Omit.....	-	10	5	7	7	19			
		-	5	11	7	4	9			
	(1) 1st year.....	20	73	31	58	92	99			
		67	40	66	57	51	48			
	(2) 2nd year.....	10	101	11	36	81	89			
		33	55	23	36	45	43			
(3)	Status: Omit.....	-	8	3	4	6	11			
		-	4	6	4	3	5			
	(1) Part-time student.....	-	26	10	12	24	18			
		-	14	21	12	13	9			
	(2) Full-time student.....	30	150	34	85	150	178			
		100	82	72	84	83	86			
(6)	Have you ever owned and operated your own business?									
	Omit.....	-	1	-	-	-	-			
		-	1	-	-	-	-			
	(1) Yes, full-time.....	3	8	3	5	11	16			
		10	4	6	5	6	8			
	(2) Yes, part-time.....	3	13	4	2	11	12			
		10	7	9	2	6	6			
	(3) No.....	24	163	40	94	158	179			
		80	89	85	93	88	86			
(7)	Do you currently own and operate your own business?									
	Omit.....	1	-	-	2	1	-			
		3	-	-	2	1	-			
	(1) Yes, full-time.....	1	2	-	4	-	5			
		3	1	-	4	-	2			
	(2) Yes, part-time.....	10	8	1	2	6	8			
		3	4	2	2	3	4			
	(3) No	25	174	46	93	173	194			
		83	95	98	92	96	94			
(8)	Are you thinking about starting a business?									
	Omit.....	-	2	1	-	-	5			
		-	1	2	-	-	2			
	(1) Yes.....	12	65	6	36	31	48			
		40	35	13	36	17	23			
	(2) Not sure.....	9	75	8	47	52	58			
		30	41	17	47	29	28			
	(3) No.....	9	42	32	18	97	96			
		30	23	68	18	54	46			
(9)	If you are thinking about starting a business, when?	18	116	40	62	150	157			
	Omit.....	60	63	85	61	83	76			
	(1) This year, prior to to completing my program.....	3	6	1	4	2	6			
		10	3	2	4	1	3			
	(2) As soon as I complete my program.....	3	1	-	1	2	3			
		10	1	-	1	1	1			
	(3) Within 1 year after completing my program	1	14	-	6	5	5			
		3	8	-	6	3	2			
	(4) 2-3 years after completing my program	3	22	2	10	9	15			
		10	12	4	10	5	7			
	(5) More than 3 years after completing my program	2	26	4	18	12	21			
		7	14	9	18	7	10			
(11)	Do you have any ideas about products or services that could be turned into a business? Omit	-	-	1	-	1	1			
		-	-	2	-	1	0			
	(1) Yes, I have an idea about a product or service	17	116	12	59	56	94			
		57	63	26	58	31	45			
	(2) I have no idea yet; however, I am thinking about it	8	38	8	25	53	48			
		27	21	17	25	29	23			
	(3) No, I do not have any idea for a product or service nor am I thinking about it	5	31	26	17	70	64			
		17	17	55	17	39	31			

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(12) Are you aware of courses at school that would be helpful to you if you would start/own a business?									
Omit.....	-	-	2	2	1	-			
	-	-	4	2	1	-			
(1) Yes.....	22	150	24	68	114	131			
	73	82	51	67	63	63			
(2) No.....	8	34	21	31	65	76			
	27	18	45	31	36	37			
(13) Are you planning on taking any of these courses before you complete your program?									
Omit.....	7	29	16	25	58	63			
	23	16	34	25	32	30			
(1) Yes.....	9	97	4	38	50	40			
	30	53	9	38	28	19			
(2) No.....	14	58	27	38	72	104			
	47	32	57	38	40	50			
(14) If you answered no to the above question, why are you not taking these courses?									
Omit.....	16	131	21	66	105	103			
	53	71	45	65	58	50			
(1) I am not interested in taking these courses.....	6	12	13	10	31	37			
	20	7	28	10	17	18			
(2) There is no room in my program to allow me to register for 1 or more of these types of courses...	4	10	11	18	26	39			
	13	5	23	18	14	19			
(3) Other.....	6	31	3	8	18	29			
	20	17	6	8	10	14			
(10) Do your instructors encourage you to start your own business?									
Omit.....	2	-	1	1	-	2			
	7	-	2	1	-	1			
(1) Yes, they provide extensive encouragement to me....	4	20	2	14	1	8			
	13	11	4	14	1	4			
(2) Yes, they provide some encouragement to me.....	9	52	2	26	20	32			
	30	28	4	26	11	15			
(3) They have neither encouraged or discouraged me.....	14	110	42	59	157	160			
	47	60	89	58	87	77			
(4) They have tended to discourage me.....	1	2	-	1	1	3			
	3	1	-	1	1	1			
(5) They have consistently discouraged me.....	-	-	-	-	1	2			
	-	-	-	-	1	1			

COMPENTENCY	AG MN StD N	ME MN StD N	HO MN StD N	HE MN StD N	BE MN StD N	TI MN StD N	DE MN StD N	GE MN StD N	OP MN St N
(15-24) Rate the amount of information you are learning about each of the following competencies in school. Omit.....									
(1) Specific technical skills related to the type of business I would be interested in starting.....	3.86 1.16	3.34 1.11	2.09 1.34	4.00 1.07	3.13 1.40	3.51 1.38			
(2) Accounting and/or bookkeeping skills.....	2.69 1.31	2.88 1.14	1.77 1.03	2.56 1.17	3.81 1.20	1.79 .99			
(3) Advertising, selling and/or marketing skills.....	2.61 .96	4.16 1.00	1.62 1.08	2.93 1.19	2.24 1.05	1.97 1.12			
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/ processes).....	2.48 1.09	3.52 1.20	1.50 1.00	2.68 1.28	2.13 1.05	1.87 1.07			
(5) Business Law (laws & regulations that affect business).....	2.45 1.15	3.04 1.26	1.66 1.08	2.74 1.35	2.86 1.46	1.80 1.15			
(6) Developing a business plan.....	2.66 1.34	3.03 1.24	1.57 .93	2.61 1.32	2.07 1.11	1.73 .99			
(7) Financing (how to obtain money to start and operate a business).....	2.69 1.23	2.53 1.23	1.52 .93	2.[illegible] 1.2[illegible]	2.28 1.30	1.67 .98			
(8) Customer relations.....	3.31 1.00	3.85 1.08	2.82 1.57	3.87 1.15	2.90 1.28	2.83 1.34			
(9) Employee relations.....	3.43 1.03	3.80 1.05	3.07 1.47	3.74 1.23	2.97 1.31	2.98 1.32			
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).....	3.72 1.19	3.40 1.33	3.30 1.53	4.37 1.03	3.07 1.41	3.67 1.38			

Scale: 5 = Very Much = I have had a specific course(s) in this or the information has been provided to me in 3 or more of my classes.
4 = Much = I have learned much about this in one or more of my classes.
3 = Some = I have learned some information about this in one or more of my classes.
2 = Little = I have been made aware of this in one or more of my classes.
1 = None = I have not had the opportunity to learn about this in any of my classes. I am not sure what th area is about.

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(25-34) Which of the following competencies do you need to learn more about in order to start your own business?									
Omit.....	5	67	16	8	44	52			
	17	36	34	8	24	25			
(1) Specific technical skills related to the type of business I would be interested in starting.....	9	75	20	43	40	108			
	30	41	43	43	22	52			
(2) Accounting and/or bookkeeping.....	6	28	16	36	80	104			
	20	15	34	36	44	50			
(3) Advertising, selling and/or marketing skills.....	9	47	15	38	77	109			
	30	26	32	38	43	53			
(4) Marketing research.....	10	70	15	40	55	109			
	33	38	32	40	31	53			
(5) Business Law.....	6	81	18	49	72	105			
	20	44	38	49	40	51			
(6) Developing a business plan.....	11	96	14	50	80	121			
	37	52	30	50	44	58			
(7) Financing.....	7	27	14	10	40	64			
	23	15	30	10	22	31			
(8) Customer relations.....	8	24	12	9	39	51			
	27	13	26	9	22	25			
(9) Employee relations.....	8	52	14	7	44	52			
	27	28	30	7	24	25			
(10) Practical job experiences provided through courses at school.....									
(37) If you were to learn more about the above competencies, how would you do so?									
Omit.....	1	3	6	3	11	9			
	3	2	13	3	6	4			
(1) Daytime courses.....	14	118	21	43	97	91			
	47	64	45	43	54	44			
(2) Evening courses.....	19	93	16	44	91	111			
	63	51	34	44	51	54			
(3) Weekend courses.....	6	19	3	15	29	25			
	20	10	6	15	16	12			
(4) Workshops and/or seminars.....	15	90	20	55	66	76			
	50	49	43	54	37	37			
(5) Television courses.....	7	30	10	12	31	34			
	23	16	21	12	17	16			
(6) Other.....	3	5	2	3	1	11			
	10	3	4	3	1	5			

ITEM STATEMENT	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	O N %
(36) Which of the following courses have you taken while a student at your school?									
Omit.....	8 27	6 3	22 47	23 23	9 5	58 28			
(1) Small Business Management.....	12 40	51 28	5 11	27 27	26 14	24 12			
(2) Business Law.....	5 17	97 53	6 13	16 16	85 47	19 9			
(3) Finance.....	3 10	25 14	4 9	11 11	28 16	8 4			
(4) Accounting/Bookkeeping.....	15 50	93 51	6 13	38 38	142 79	22 11			
(5) Marketing.....	8 27	157 85	5 11	16 16	20 11	23 11			
(6) Advertising.....	3 10	140 76	4 9	19 19	8 4	16 8			
(7) Salesmanship.....	8 27	140 76	3 6	31 31	4 2	21 10			
(8) Business Communications.....	11 37	90 49	6 13	52 51	97 54	69 33			
(9) Economics.....	9 30	122 66	17 36	41 41	122 68	101 49			
(35) Are you now taking, or have you taken, any seminars, workshops, or courses outside of your program that would assist you in starting/operating your own business?									
Omit.....	- -	4 2	2 4	3 3	3 2	2 1			
(1) Yes.....	13 43	46 25	6 13	34 34	26 14	53 26			
(2) No.....	17 57	134 73	39 83	64 63	151 84	152 73			
(38) Are you an active member in any student organization related to your program?									
Omit.....	- -	2 1	2 4	2 2	3 2	2 1			
(1) Yes.....	17 57	52 28	9 19	50 50	39 22	81 39			
(2) No.....	13 43	130 71	36 77	49 49	138 77	124 60			
(39) If you are in a student organization, which of the following are activities of your organization?									
Omit.....	14 47	124 67	39 83	62 61	140 78	130 63			
(1) We take tours of businesses.....	14 47	32 17	6 13	27 27	25 14	60 29			
(2) We invite business owners to give presentations on what they do.....	11 37	43 23	3 6	21 21	27 15	36 17			
(3) We organize seminars/workshops that would encourage people to start/operate a business.....	3 10	19 10	2 4	11 11	8 4	14 7			

STUDENT SURVEY RESULTS BY QUESTION #2: YEAR IN PROGRAM

A total of 763 students at 15 of the VTAE Districts within Wisconsin completed the student survey for the Entrpreneurship Project.

	Item Statement	Total N %	1st year N %	2nd year N %
(4)	**Sex:** Omit	1 0	1 0	- -
	(1) Male	315 41	151 40	146 44
	(2) Female	447 59	230 60	185 56
(5)	**Age:** Omit	1 0	- -	1 0
	(1) 20 or younger	283 37	154 40	112 34
	(2) 21-24	181 24	74 19	103 31
	(3) 25-34	185 24	93 24	75 23
	(4) 35-44	86 11	42 11	34 10
	(5) 45-54	22 3	14 4	6 2
	(6) 55-64	3 0	3 1	- -
	(7) 65 or older	2 0	2 1	- -

	Item Statement	Total N %	1st year N %	2nd year N %
(Top of page)	Program enrolled in: Omit			
	(1) Agribusiness			
	(2) Marketing Education			
	(3) Health Occupations			
	(4) Home Economics			
	(5) Business Education			
	(6) Trade & Industry			
	(7) Developmental Education			
	(8) General Education			
	(9) Other Programs			
(1)	Length of Program: Omit	6 1	2 1	2 1
	(1) Less than 1 year vocational diploma	13 2	10 3	- -
	(2) 1 year vocational diploma	124 16	110 29	6 2
	(3) 2 year vocational diploma	101 13	45 12	51 15
	(4) 2 year associate degree	502 66	205 54	270 82
	(5) Other type/length of program	17 2	10 3	2 1
(2)	Year in Program: Omit	50 7	- -	- -
	(1) 1st year	382 50	382 100	-
	(2) 2nd year	331 43	-	331 100
(3)	Status: Omit	32 4	2 1	2 1
	(1) Part-time student	93 12	54 14	31 9
	(2) Full-time student	638 84	326 85	298 90

	Item Statement	Total N %	1st year N %	2nd year N %
(6)	Have you ever owned and operated your own business?			
	Omit	1 0	- -	1 0
	(1) Yes, full-time	49 6	25 7	20 6
	(2) Yes, part-time	46 6	27 7	15 5
	(3) No	668 88	331 87	295 89
(7)	Do you currently own and operate your own business?			
	Omit	4 1	3 1	1 0
	(1) Yes, full-time	14 2	6 2	6 2
	(2) Yes, part-time	29 4	15 4	12 4
	(3) No	716 94	358 94	312 94
(8)	Are you thinking about starting a business?			
	Omit	10 1	7 2	3 1
	(1) Yes	201 26	92 24	96 29
	(2) Not sure	252 33	137 36	99 30
	(3) No	300 39	146 38	133 40
(9)	If you are thinking about starting a business, when?			
	Omit	554 73	287 75	233 70
	(1) This year, prior to completing my program	23 3	9 2	11 3
	(2) As soon as I complete my program	10 1	5 1	5 2
	(3) Within 1 year after completing my program.....	31 4	14 4	15 5
	(4) 2-3 years after completing my program.....	62 8	32 8	25 8
	(5) More than 3 years after completing my program...	84 11	36 9	42 13
(11)	Do you have any ideas about products or services that could be turned into a business?			
	Omit	3 0	1 0	2 1
	(1) Yes, I have an idea about a product or service ..	363 48	180 47	163 49
	(2) I have no idea yet; however, I am thinking about it	183 24	91 24	80 24
	(3) No, I do not have any idea for a product or service nor am I thinking about it	215 28	111 29	86 26

	Item Statement	Total N %	1st year N %	2nd year N %
(12)	Are you aware of courses at school that would be helpful to you if you would start/own a business?			
	Omit	5 1	4 1	1 0
	(1) Yes	517 68	244 64	237 72
	(2) No	241 32	134 35	93 28
(13)	Are you planning on taking any of these courses before you complete your program?			
	Omit	203 27	117 31	78 24
	(1) Yes	241 32	128 34	99 30
	(2) No	319 42	137 36	154 47
(14)	If you answered no to the above question, why are you not taking these courses?			
	Omit	451 59	246 64	180 54
	(1) I am not interested in taking these courses	111 15	54 14	44 13
	(2) There is no room in my program to allow me to register for 1 or more of these types of courses.	109 14	50 13	52 16
	(3) Other	97 13	35 9	57 17
(10)	Do your instructors encourage you to start your own business?			
	Omit	7 1	5 1	2 1
	(1) Yes, they provide extensive encouragement to me .	50 7	19 5	25 8
	(2) Yes, they provide some encouragement to me	143 19	66 17	74 22
	(3) They have neither encouraged or discouraged me ..	552 72	290 76	222 67
	(4) They have tended to discourage me	8 1	1 0	6 2
	(5) They have consistently discouraged me	3 0	1 0	2 1

Competency	Total Mean StD N	1st year Mean StD N	2nd year Mean StD N
(15-24) Rate the amount of information you are learning about each of the following competencies in school. Omit			
(1) Specific technical skills related to the type of business I would be interested in starting ...	3.36 1.34	3.23 1.38	3.49 1.27
(2) Accounting and/or bookkeeping skills	2.68 1.35	2.50 1.36	2.91 1.31
(3) Advertising, selling and/or marketing skills	2.71 1.40	2.50 1.33	2.96 1.44
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	2.45 1.31	2.22 1.26	2.74 1.33
(5) Business Law (laws & regulations that affect business)	2.50 1.38	2.32 1.36	2.70 1.37
(6) Developing a business plan	2.27 1.26	2.02 1.16	2.59 1.30
(7) Financing (how to obtain money to start and operate a business)	2.16 1.23	2.00 1.15	2.40 1.31
(8) Customer relations	3.25 1.33	3.14 1.32	3.40 1.31
(9) Employee relations	3.30 1.30	3.19 1.30	3.45 1.26
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).	3.51 1.40	3.33 1.43	3.68 1.33

Scale:
- 5 = Very Much = I have had a specific course(s) in this or the information has been provided to me in 3 or more of my classes.
- 4 = Much = I have learned much about this in one or more of my classes.
- 3 = Some = I have learned some information about this in one or more of my classes.
- 2 = Little = I have been made aware of this in one or more of my classes.
- 1 = None = I have not had the opportunity to learn about this in any of my classes. I am not sure what this area is about.

	Item Statement	Total N %	1st year N %	2nd year N %
(25-34)	Which of the following competencies do you need to learn more about in order to start your own business?			
	Omit			
	(1) Specific technical skills related to the type of business I would be interested in starting ...	197 26	106 28	83 25
	(2) Accounting and/or bookkeeping	300 39	159 42	124 37
	(3) Advertising, selling and/or marketing skills	278 36	149 39	118 36
	(4) Marketing research	300 39	164 43	120 36
	(5) Business Law	302 40	157 41	130 39
	(6) Developing a business plan	336 44	176 46	140 42
	(7) Financing	380 50	192 50	165 50
	(8) Customer relations	166 22	93 24	65 20
	(9) Employee relations	146 19	85 22	56 17
	(10) Practical job experiences provided through courses at school	182 24	100 26	75 23
(37)	If you were to learn more about the above competencies, how would you do so?			
	Omit	34 4	17 4	14 4
	(1) Daytime courses	392 51	231 60	139 42
	(2) Evening courses	380 50	159 42	198 60
	(3) Weekend courses	98 13	43 11	50 15
	(4) Workshops and/or seminars	324 42	150 39	154 47
	(5) Television courses	125 16	62 16	56 17
	(6) Other	25 3	17 4	8 2

	Item Statement	Total N %	1st year N %	2nd year N %
(36)	Which of the following courses have you taken while a student at your school?			
	Omit	127 17	85 22	32 10
	(1) Small Business Management	148 19	49 13	89 27
	(2) Business Law	232 30	75 20	143 43
	(3) Finance	81 11	20 5	53 16
	(4) Accounting/Bookkeeping	320 42	124 32	176 53
	(5) Marketing	232 30	85 22	131 40
	(6) Advertising	192 25	62 16	117 35
	(7) Salesmanship	210 29	71 19	122 37
	(8) Business Communications	330 43	147 38	161 49
	(9) Economics	420 55	137 36	252 76
(35)	Are you now taking, or have you taken, any seminars, workshops, or courses outside of your program that would assist you in starting/operating your own business?			
	Omit	15 2	7 2	7 2
	(1) Yes	182 24	87 23	83 25
	(2) No	566 74	288 75	241 73
(38)	Are you an active member in any student organization related to your program?			
	Omit	11 1	6 2	5 2
	(1) Yes	252 33	106 28	132 40
	(2) No	500 66	270 71	194 59
(39)	If you are in a student organization, which of the following are activities of your organization?			
	Omit	519 68	291 76	194 59
	(1) We take tours of businesses	168 22	53 14	105 32
	(2) We invite business owners to give presentations on what they do	144 19	52 14	82 25
	(3) We organize seminars/workshops that would encourage people to start/operate a business	58 8	25 17	29 9

STUDENT SURVEY RESULTS BY QUESTION #6 HAVE YOU EVER OWNED A BUSINESS?

A total of 763 in-school students at 15 of the VTAE Districts within Wisconsin completed the student survey for the Entrepreneurship Project.

	Item Statement	FT = Full-Time PT = Part-Time	Total N %	Yes-FT N %	Yes-PT N %	No N %
(4)	Sex:	Omit	1 0	- -	- -	1 0
	(1) Male		315 41	25 51	24 52	265 40
	(2) Female		448 59	24 49	22 48	402 60
(5)	Age:	Omit	1 0	- -	- -	1 0
	(1) 20 or younger		283 37	- -	7 15	276 41
	(2) 21-24		181 24	4 8	7 15	170 25
	(3) 25-34		186 24	21 43	13 28	152 23
	(4) 35-44		86 11	18 37	14 30	53 8
	(5) 45-54		22 3	5 10	5 11	12 2
	(6) 55-64		3 0	1 2	- -	2 0
	(7) 65 or older		2 0	- -	- -	2 0

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(Top of Page)	Program enrolled in: Omit				
	(1) Agribusiness				
	(2) Marketing Education				
	(3) Health Occupations				
	(4) Home Economics				
	(5) Business Education				
	(6) Trade & Industry				
	(7) Developmental Education				
	(8) General Education				
	(9) Other Programs				
(1)	Length of Program: Omit	6 1	- -	- -	6 1
	(1) Less than 1 year vocational diploma	13 2	2 4	- -	11 2
	(2) 1 year vocational diploma	124 16	8 16	10 22	106 16
	(3) 2 year vocational diploma	102 13	9 18	5 11	88 13
	(4) 2 year associate degree	502 66	30 61	29 63	442 65
	(5) Other type/length of program	17 2	- -	2 4	15 2
(2)	Year in Program: Omit	50 7	4 8	4 9	42 6
	(1) 1st year	383 50	25 51	27 59	331 50
	(2) 2nd year	331 43	20 41	15 33	295 44
(3)	Status: Omit	32 4	2 4	1 2	29 4
	(1) Part-time student	93 12	8 16	9 20	75 11
	(2) Full-time student	639 84	39 80	36 78	564 84

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(6)	Have you ever owned and operated your own business?				
	Omit	1 0	- -	- -	- -
	(1) Yes, full-time	50 7	49 100	1 2	- -
	(2) Yes, part-time	47 6	1 2	46 100	- -
	(3) No	668 87	- -	- -	668 100
(7)	Do you currently own and operate your own business?				
	Omit	4 1	- -	- -	4 1
	(1) Yes, full-time	14 2	12 24	2 4	- -
	(2) Yes, part-time	29 4	5 10	20 43	4 1
	(3) No	717 94	32 65	24 52	660 99
(8)	Are you thinking about starting a business?				
	Omit	10 1	3 6	5 11	2 0
	(1) Yes	201 26	20 41	13 28	168 25
	(2) Not sure	253 33	12 24	16 35	225 34
	(3) No	300 39	14 29	12 26	273 41
(9)	If you are thinking about starting a business, when?				
	Omit	555 73	30 61	31 67	493 74
	(1) This year, prior to completing my program	23 3	6 12	4 9	13 2
	(2) As soon as I complete my program	10 1	3 6	-	7 1
	(3) Within 1 year after completing my program.....	31 4	3 6	3 7	25 4
	(4) 2-3 years after completing my program.....	62 8	3 6	1 2	58 9
	(5) More than 3 years after completing my program....	84 11	4 8	7 15	73 11
(11)	Do you have any ideas about products or services that could be turned into a business?				
	Omit	3 0	- -	1 2	2 0
	(1) Yes, I have an idea about a product or service ..	363 48	30 61	30 65	303 45
	(2) I have no idea yet; however, I am thinking about it	184 24	9 18	10 22	165 25
	(3) No, I do not have any idea for a product or service nor am I thinking about it	215 28	10 20	5 11	199 30

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(12)	Are you aware of courses at school that would be helpful to you if you would start/own a business?				
	Omit	5 1	1 2	1 2	3 0
	(1) Yes	518 68	32 65	39 85	446 67
	(2) No	241 32	16 33	6 13	219 33
(13)	Are you planning on taking any of these courses before you complete your program?				
	Omit	203 27	14 29	4 9	185 28
	(1) Yes	242 32	18 37	22 48	201 30
	(2) No	319 42	17 35	20 43	282 42
(14)	If you answered no to the above question, why are you not taking these courses?				
	Omit	452 59	31 63	26 57	394 59
	(1) I am not interested in taking these courses	111 15	3 6	5 11	103 15
	(2) There is no room in my program to allow me to register for 1 or more of these types of courses.	109 14	8 16	9 20	92 14
	(3) Other	97 13	9 18	6 13	82 12
(10)	Do your instructors encourage you to start your own business?				
	Omit	7 1	1 2	2 4	4 1
	(1) Yes, they provide extensive encouragement to me .	50 7	6 12	2 4	42 6
	(2) Yes, they provide some encouragement to me	144 19	13 27	10 22	120 18
	(3) They have neither encouraged or discouraged me ..	552 72	28 57	32 70	492 74
	(4) They have tended to discourage me	8 1	- -	- -	8 1
	(5) They have consistently discouraged me	3 0	1 2	- -	2 0

	Competency	Total MN N %	Yes-FT MN N %	Yes-PT MN N %	No MN N %
(15-24)	Rate the amount of information you are learning about each of the following competencies in school. Omit				
	(1) Specific technical skills related to the type of business I would be interested in starting ...	3.36 1.34	3.60 1.40	3.43 1.34	3.33 1.33
	(2) Accounting and/or bookkeeping skills	2.68 1.35	2.64 1.44	2.83 1.31	2.68 1.35
	(3) Advertising, selling and/or marketing skills	2.71 1.40	2.73 1.41	2.70 1.58	2.70 1.39
	(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	2.45 1.31	2.50 1.37	2.34 1.35	2.45 1.30
	(5) Business Law (laws & regulations that affect business)	2.50 1.38	2.69 1.52	2.33 1.48	2.50 1.37
	(6) Developing a business plan	2.27 1.26	2.25 1.34	2.33 1.36	2.27 1.24
	(7) Financing (how to obtain money to start and operate a business)	2.16 1.23	2.06 1.31	2.09 1.31	2.17 1.22
	(8) Customer relations	3.25 1.33	3.04 1.35	3.14 1.29	3.27 1.33
	(9) Employee relations	3.29 1.30	3.11 1.37	3.14 1.21	3.32 1.30
	(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).	3.51 1.40	3.30 1.50	3.09 1.52	3.55 1.38

Scale:
- 5 = Very Much = I have had a specific course(s) in this or the information has been provided to me in 3 or more of my classes.
- 4 = Much = I have learned much about this in one or more of my classes.
- 3 = Some = I have learned some information about this in one or more of my classes.
- 2 = Little = I have been made aware of this in one or more of my classes.
- 1 = None = I have not had the opportunity to learn about this in any of my classes. I am not sure what this area is about.

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(25-34)	Which of the following competencies do you need to learn more about in order to start your own business?				
	(1) Specific technical skills related to the type of business I would be interested in starting ...	197 26	9 18	3 7	185 28
	(2) Accounting and/or bookkeeping	300 39	14 29	14 30	271 41
	(3) Advertising, selling and/or marketing skills	278 36	13 27	14 30	251 38
	(4) Marketing research	300 39	17 35	13 28	270 40
	(5) Business Law	302 40	17 35	17 37	268 40
	(6) Developing a business plan	336 44	17 35	13 28	305 46
	(7) Financing	308 50	19 39	18 39	343 51
	(8) Customer relations	166 22	7 14	3 7	156 23
	(9) Employee relations	146 19	7 14	3 7	136 20
	(10) Practical job experiences provided through courses at school	182 24	6 12	4 9	172 26
(37)	If you were to learn more about the above competencies, how would you do so?				
	Omit	34 4	2 4	2 4	30 4
	(1) Daytime courses	393 51	18 37	22 48	352 53
	(2) Evening courses	380 50	28 57	21 46	331 50
	(3) Weekend courses	98 13	7 14	10 22	81 12
	(4) Workshops and/or seminars	325 43	26 53	19 41	280 42
	(5) Television courses	126 16	13 27	11 24	102 15
	(6) Other	25 3	3 6	2 4	20 3

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	NO N %
(36)	Which of the following courses have you taken while a student at your school?				
	Omit	127 17	7 14	8 17	112 17
	(1) Small Business Management	149 20	14 29	10 22	124 19
	(2) Business Law	232 30	21 43	10 22	200 30
	(3) Finance	81 11	9 18	5 11	67 10
	(4) Accounting/Bookkeeping	320 42	19 39	18 39	283 42
	(5) Marketing	233 30	16 33	17 37	199 30
	(6) Advertising	192 25	9 18	11 24	172 26
	(7) Salesmanship	210 27	10 20	14 30	185 28
	(8) Business Communications	330 43	25 51	21 46	284 43
	(9) Economics	420 55	27 55	20 43	372 56
(35)	Are you now taking, or have you taken, any seminars, workshops, or courses outside of your program that would assist you in starting/operating your own business?				
	Omit	15 2	3 6	1 2	11 2
	(1) Yes	183 24	19 39	18 39	146 22
	(2) No	566 74	27 55	27 59	511 76
(38)	Are you an active member in any student organization related to your program?				
	Omit	11 1	1 2	1 2	9 1
	(1) Yes	252 33	22 45	16 35	214 32
	(2) No	501 66	26 53	29 63	445 67
(39)	If you are in a student organization, which of the following are activities of your organization?				
	Omit	520 68	32 65	29 63	458 69
	(1) We take tours of businesses	168 22	13 27	13 28	142 21
	(2) We invite business owners to give presentations on what they do	144 19	10 20	11 24	123 18
	(3) We organize seminars/workshops that would encourage people to start/operate a business	58 8	2 4	2 4	54 8

INSTRUCTOR SURVEY RESULTS BASED ON SEX OF RESPONDENTS

A total of 283 instructors at 14 of the VTAE Districts within Wisconsin completed the instructor survey for the Entrepreneurship Project. One district returned instructor surveys after data processing had been completed and does not have data included within these results.

	Item Statement	Total N %	Male N %	Female N %
(1)	Sex: Omit	-	-	-
	(1) Male	198	198	-
		70	10	
	(2) Female	85	-	85
		30		100
(2)	Age: Omit	3	1	2
		1	1	2
	(1) 24 or younger	0	0	0
		0	0	0
	(2) 25-34	24	15	11
		8	8	9
	(3) 35-44	119	77	49
		42	39	42
	(4) 45-54	89	69	24
		31	35	20
	(5) 55-64	46	34	14
		16	17	12
	(6) 65 or older	2	2	0
		1	1	0
(3)	Are you: Omit	0	0	0
		0	0	0
	(1) Employed less than one-half time	8	6	2
		3	3	2
	(2) Employed one-half time or more	275	192	83
		97	97	98
(Top of Page)	Program you instruct in:			
	(1) Agribusiness	10	8	2
		100	80	20
	(2) Marketing Education	37	25	12
		100	68	32
	(3) Health Occupations	15	6	9
		100	40	60
	(4) Home Economics	32	14	18
		100	44	56
	(5) Business Education	75	46	29
		100	61	39
	(6) Trade & Industry	81	81	-
		100	100	-
	(7) Developmental Education	8	2	6
		100	25	75
	(8) General Education	10	7	3
		100	70	30
	(9) Other Programs	2	-	2
		100	-	100

	Item Statement	Total N %	Male N %	Female N %
(4)	Have you ever owned and operated your own business?			
	Omit	0	0	0
		0	0	0
	(1) Yes, full-time	67	50	17
		23	24	20
	(2) Yes, part-time	82	63	19
		28	31	22
	(3) No	142	92	50
		49	45	58
(5)	Are you thinking about starting a business?			
	Omit	17	11	6
		6	6	7
	(1) Yes	62	49	13
		22	25	15
	(2) No	205	138	66
		72	70	78
(6)	When do you plan to start a business?			
	Omit	220	150	70
		78	76	82
	(1) Within one year	18	13	5
		6	7	6
	(2) Later than one year from now	45	35	10
		16	18	12
(8)	If you have owned and operated your own business or consulting firm, do you share information with your students about your business experiences?			
	Omit	103	63	40
		36	32	47
	(1) Yes, I frequently share information with them ..	102	81	21
		36	41	25
	(2) Yes, I occassionally share information with them	64	44	20
		23	22	24
	(3) No, I do not share information with them	14	10	4
		5	5	5
(9)	Do you present alternative ways students can enter into their own business with minimal costs?			
	Omit	24	16	8
		8	8	9
	(1) Yes, I encourage them to look for ways to start their own business with minimal cost	66	44	22
		23	22	26
	(2) I present alternatives but neither encourage nor discourage them	111	85	26
		39	43	31
	(3) I do not present alternatives to them	83	54	29
		29	27	34

	Item Statement	Total N %	Male N %	Female N %
(12)	Within the courses that you teach, do you discuss the factors and competencies required of successful entrepreneurs? Omit	2	1	1
		1	1	2
	(1) Yes, I provide students with much information ..	67	49	18
		24	25	21
	(2) Yes, I provide students with some information ..	119	89	30
		42	45	35
	(3) No, I do not provide information to students ...	95	59	36
		34	30	42
(13)	Within your school, have specific courses been developed on entrepreneurship? Omit	3	1	2
		1	1	2
	(1) Yes	121	82	39
		43	41	46
	(2) Not sure	128	91	37
		45	46	44
	(3) No	31	24	7
		11	12	8
(14)	Do former students who have started their own businesses contact you for technical assistance? Omit	12	8	4
		4	4	5
	(1) Yes	156	116	40
		55	59	47
	(2) No	115	74	41
		41	37	48
(15)	Do you have students work with business entrepreneurs in work experience or co-op programs? Omit	7	5	2
		2	3	2
	(1) Yes	118	87	31
		42	44	36
	(2) No	158	106	52
		56	54	61
(16)	Within the courses you teach, do you study people who are entrepreneurs? Omit	7	5	2
		2	3	2
	(1) Yes	87	60	27
		31	30	32
	(2) No	189	133	56
		67	67	66

	Competency	Total Mean StD	Male Mean StD	Female Mean StD
(17-27)	Rate the amount of importance that each of the following competencies has for students who would be starting their own business.			
	(1) Specific technical skills related to the type of business the students would be interested in starting	4.73	4.71	4.80
		.55	.56	.51
	(2) Accounting and/or bookkeeping skills	4.06	3.97	4.25
		.86	.89	.78
	(3) Advertising, selling and/or marketing skills	4.28	4.18	4.51
		.83	.87	.67
	(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	4.02	3.95	4.18
		.89	.89	.87
	(5) Business Law (laws & regulations that affect business)	3.72	3.55	4.12
		.94	.91	.88
	(6) Developing a business plan	4.37	4.33	4.46
		.82	.84	.77
	(7) Financing (how to obtain money to start and operate a business)	4.38	4.32	4.51
		.78	.83	.61
	(8) Customer relations	4.56	4.49	4.73
		.67	.72	.50
	(9) Employee relations	4.45	4.36	4.64
		.73	.77	.60
	(10) Practical job experiences provided through courses at school (work experiences, labs, etc.)	4.36	4.30	4.49
		.77	.78	.74
	(11) Other	4.67	4.59	4.83
		.48	.50	.39

Scale: 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a business.

4 = Much = It is important for students to learn about this competency.

3 = Some = It is helpful for students to learn some about this competency.

2 = Little = Students should be made aware of this competency.

1 = None = I do not believe students need to learn about this competency.

	Item Statement	Total N %	Male N %	Female N %
(28-38)	Which of the following competencies do you need to learn more about in order to present information about entrepreneurship to your students?			
	(1) Specific technical skills related to the type of business I would be interested in starting ..	49	32	17
		17	16	20
	(2) Accounting and/or bookkeeping skills	94	63	31
		33	32	36
	(3) Advertising, selling and/or marketing skills ...	118	75	43
		42	38	51
	(4) Marketing research	132	82	50
		47	41	59
	(5) Business Law	128	82	46
		45	41	54
	(6) Developing a business plan	120	80	40
		42	40	47
	(7) Financing	126	84	42
		45	42	49
	(8) Customer relations	49	38	11
		17	19	13
	(9) Employee relations	50	39	11
		18	20	13
	(10) Practical job experiences provided through courses at school	28	19	9
		10	10	11
	(11) Other	9	7	2
		3	4	2
(7)	Do you encourage students to start their own businesses?			
	Omit	2	1	1
		1	1	1
	(1) Yes, I provide extensive encouragement to them .	26	17	9
		9	9	11
	(2) Yes, I provide some encouragement to them	104	75	29
		37	38	34
	(3) I neither encourage nor discourage them	148	101	47
		52	51	55
	(4) I tend to discourage them	4	4	-
		1	2	-
	(5) I consistently discourage them	-	-	-

	Item Statement	Total N %	Male N %	Female N %
(40)	Within the courses you teach, which of the following are activities used by you?			
	Omit	21 7	16 8	5 6
	(1) Speakers	204 72	135 68	69 81
	(2) Tours of business/industry	203 72	138 70	65 76
	(3) Seminars by business people	95 34	70 35	25 29
	(4) Co-op and work experience programs	123 43	79 40	44 52
	(5) Instructors from other areas	116 41	77 39	39 46
	(6) Other activities	44 16	26 13	18 21
(41)	Do you try to include information on entrepreneurship in the activities listed in the question above?			
	Omit	20 7	14 7	6 7
	(1) Yes	123 43	82 41	41 48
	(2) No	140 49	102 52	38 45
(39)	As an instructor, are you actively involved with any student organizations on campus?			
	Omit	6 2	5 3	1 1
	(1) Yes	106 37	80 40	26 31
	(2) No	171 60	113 57	58 68
(10)	Does your community have a business incubator?			
	Omit	6 2	4 2	2 2
	(1) Yes, and it is functioning	84 30	68 34	16 19
	(2) Yes, but it has not yet started operations	29 10	22 11	7 8
	(3) Not sure if there is a business incubator	117 41	74 37	43 51
	(4) No, there is no business incubator	48 17	31 16	17 20

	Item Statement	Total N %	Male N %	Female N %
(11)	What types of assistance does your VTAE provide to the business incubator?			
	Omit	85 30	46 23	39 46
	(1) Staff members are consulted to provide technical assistance to the businesses contained in the incubator	59 21	48 24	11 13
	(2) Students complete co-op or work experience programs with the various businesses	38 13	26 13	12 14
	(3) Businesses bring their problems and concerns into the classroom so students/staff can work with them in finding solutions	22 8	18 9	4 5
	(4) I am not sure if the businesses in the incubator make use of the expertise of our school, students or staff members	124 44	93 47	31 36

INSTRUCTOR SURVEY RESULTS BASED ON THE PROGRAM AREA OF THE RESPONDENTS

A total of 283 instructors at 14 of the VTAE Districts within Wisconsin completed the instructor survey for the Entrepreneurship Project. One district returned instructor surveys after data processing had been completed and does not have data included within these results

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(1) Sex: Omit.....	-	-	-	-	-	-	-	-	-
(1) Male.....	8	25	6	14	46	81	2	7	-
	80	68	40	44	61	100	25	70	-
(2) Female.....	2	12	9	18	29	-	6	3	2
	20	32	60	56	39	-	75	30	100
(2) Age: Omit.....	-	1	-	2	-	-	-	-	-
		3		6					
(1) 24 or younger.....	-	-	-	-	-	-	-	-	-
(2) 25-34.....	1	3	3	3	6	6	-	-	-
	10	8	20	9	8	7	-	-	-
(3) 35-44.....	2	18	5	15	30	34	6	6	1
	20	49	33	47	40	42	75	60	50
(4) 45-54.....	3	10	4	6	25	32	1	2	1
	30	27	27	19	33	40	13	20	50
(5) 55-64.....	4	5	3	6	13	8	1	2	-
	40	14	20	19	17	10	13	20	-
(6) 65 or older.....	-	-	-	-	1	1	-	-	-
	-	-	-	-	1	1	-	-	-
(3) Are you: Omit.....	-	-	-	-	-	-	-	-	-
(1) Employed less than one-half time.....	-	-	-	2	6	-	-	-	-
				6	8				
(2) Employed one-half time or more.....	10	37	15	30	69	81	8	10	2
	100	100	100	94	92	100	100	100	100
(TP) Program you instruct in: Omit.....	-	-	-	-	-	-	-	-	-
(1) Agribusiness.....	10	-	-	-	-	-	-	-	-
	100								
(2) Marketing Education.....	-	37	-	-	-	-	-	-	-
		100							
(3) Health Occupations.....	-	-	15	-	-	-	-	-	-
			100						
(4) Home Economics.....	-	-	-	32	-	-	-	-	-
				100					
(5) Business Education.....	-	-	-	-	75	-	-	-	-
					100				
(6) Trade & Industry.....	-	-	-	-	-	81	-	-	-
						100			
(7) Developmental Education.....	-	-	-	-	-	-	8	-	-
							100		
(8) General Education.....	-	-	-	-	-	-	-	10	-
								100	
(9) Other Programs.....	-	-	-	-	-	-	-	-	2
									100

	ITEM STATEMENT	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	OP N %
(4)	Have you ever owned and operated your own business?									
	Omit.....	-	-	-	-	-	-	-	-	-
	(1) Yes, full-time.....	4 36	10 26	1 7	14 44	16 21	18 21	- -	1 10	- -
	(2) Yes, part-time.....	2 18	6 16	4 27	6 19	29 37	23 27	3 38	3 30	- -
	(3) No.....	5 50	22 58	10 67	12 38	33 42	43 51	5 63	6 60	2 100
(5)	Are you thinking about starting a business?									
	Omit.....	1 10	3 8	1 7	3 9	4 5	4 5	- -	- -	- -
	(1) Yes.....	2 20	13 35	3 20	6 19	16 21	15 19	3 38	2 20	- -
	(2) No.....	7 70	21 57	11 73	23 72	55 73	62 77	5 63	8 80	2 100
(6)	When do you plan to start a business?									
	Omit.....	8 80	24 65	12 80	26 81	58 77	66 81	5 63	8 80	2 100
	(1) Within one year.....	1 10	2 5	1 7	2 6	7 9	2 2	1 13	1 10	- -
	(2) Later than one year from now.....	1 10	11 30	2 13	4 13	10 13	13 16	2 25	1 10	- -
(8)	If you have owned and operated your own business or consulting firm, do you share information with your students about your business experiences?									
	Omit.....	2 20	12 32	8 53	10 31	24 32	31 38	5 63	6 60	2 100
	(1) Yes, I frequently share information with them.....	5 50	12 32	4 27	15 47	34 45	23 28	1 13	3 30	- -
	(2) Yes, I occasionally share information with them....	3 30	10 27	1 7	6 19	16 21	22 27	2 25	- -	- -
	(3) No, I do not share information with them.....	- -	3 8	2 13	1 3	1 1	5 6	- -	1 10	- -
(9)	Do you present alternative ways students can enter into their own business with minimal costs?									
	Omit.....	1 10	1 3	5 33	1 3	7 9	7 9	1 13	- -	- -
	(1) Yes, I encourage them to look for ways to start their own business with minimal cost.....	2 20	14 37	2 13	14 44	15 20	12 15	3 38	1 10	- -
	(2) I present alternatives but neither encourage nor discourage them.....	7 70	15 39	4 27	15 47	31 41	28 35	1 13	4 40	- -
	(3) I do not present alternatives to them.....	- -	8 21	4 27	2 6	22 29	34 42	3 38	5 50	2 100

ITEM STATEMENT	AG	ME	HO	.	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(12) Within the courses that you teach, do you discuss the factors and competencies required of successful entrepreneurs? Omit.....	-	1	1	-	-	-	-	-	-
	-	3	7	-	-	-	-	-	-
(1) Yes, I provide students with much information.....	4	16	2	12	20	8	-	2	-
	40	43	13	38	27	10	-	20	-
(2) Yes, I provide students with some information.....	6	11	6	15	30	40	2	4	1
	60	30	40	47	40	49	25	40	50
(3) No, I do not provide information to students.....	-	9	6	5	25	33	6	4	1
	-	24	40	16	33	41	75	40	50
(13) Within your school, have specific courses been developed on entrepreneurship? Omit.....	-	-	1	1	1	-	-	-	-
	-	-	7	3	1	-	-	-	-
(1) Yes.....	8	18	5	8	42	23	6	5	-
	80	49	33	25	56	28	75	50	-
(2) Not sure.....	1	14	9	20	24	48	2	3	2
	10	38	60	63	32	59	25	30	100
(3) No.....	1	5	-	3	8	10	-	2	-
	10	14	-	9	11	12	-	20	-
(14) Do former students who have started their own businesses contact you for technical assistance? Omit.....	-	-	2	2	3	5	-	-	-
	-	-	13	6	4	6	-	-	-
(1) Yes.....	8	22	5	24	34	50	1	4	1
	80	59	33	75	45	62	13	40	50
(2) No.....	2	15	8	6	38	26	7	6	1
	20	41	53	19	51	32	88	60	50
(15) Do you have students work with business entrepreneurs in work experience or co-op programs? Omit.....	-	-	2	-	1	3	-	-	-
	-	-	13	-	1	4	-	-	-
(1) Yes.....	7	18	4	25	28	26	2	1	1
	70	49	27	78	37	32	25	10	50
(2) No.....	3	19	9	7	46	52	6	9	1
	31	51	60	22	61	64	75	90	50
(16) Within the courses you teach, do you study people who are entrepreneurs? Omit.....	-	-	2	-	-	3	1	-	-
	-	-	13	-	-	4	13	-	-
(1) Yes.....	8	20	3	16	25	7	2	2	1
	80	54	20	50	33	9	25	20	50
(2) No.....	2	17	10	16	50	71	5	8	1
	20	46	67	50	67	88	63	80	50

COMPETENCY	AG MN StD	ME MN StD	HO MN StD	HE MN StD	BE MN StD	TI MN StD	DE MN StD	GE MN StD	OP MN StD
Rate the amount of importance that each of the following competencies has for students who would be starting their own business.									
(17-27)									
(1) Specific technical skills related to the type of business the students would be interested in starting.....	4.78 .44	4.64 .54	4.93 .27	4.69 .59	4.68 .60	4.84 .49	4.71 .49	4.70 .67	5.00 .00
(2) Accounting and/or bookkeeping skills.....	4.10 .74	4.28 .74	4.21 .89	4.09 .78	4.15 .73	3.84 .97	3.86 1.07	4.20 1.03	5.00 .00
(3) Advertising, selling and/or marketing skills.....	4.20 .63	4.51 .70	4.71 .61	4.44 .72	4.27 .76	4.07 .93	4.29 .76	4.44 .73	4.50 .71
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes)	3.70 .82	4.22 .68	4.29 .73	3.97 1.00	4.05 .86	3.87 .97	4.43 .79	4.22 .67	4.50 .71
(5) Business Law (laws & regulations that affect business).....	3.30 .82	3.75 .77	4.21 .70	4.09 .89	3.67 .96	3.47 .92	4.00 .82	3.90 1.29	4.50 .71
(6) Developing a business plan.....	4.00 1.15	4.69 .53	4.29 .91	4.44 .67	4.38 .77	4.18 .92	4.71 .49	4.70 .48	5.00 .00
(7) Financing (how to obtain money to start and operate a business).....	4.30 .67	4.42 .60	4.64 .50	4.50 .62	4.28 .81	4.29 .89	4.57 .53	4.90 .32	5.00 .00
(8) Customer relations.....	4.20 .92	4.69 .47	4.64 .63	4.88 .34	4.55 .58	4.38 .77	4.86 .38	4.70 .67	5.00 .00
(9) Employee relations.....	4.40 .52	4.53 .56	4.64 .63	4.84 .45	4.37 .69	4.24 .86	4.57 .53	4.70 .67	5.00 .00
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).....	4.40 .52	4.39 .69	4.57 .65	4.69 .54	4.12 .84	4.45 .70	3.86 1.07	4.44 .73	4.50 .71
(11) Other.....	5.00 .00	4.86 .38	4.00 .00	4.75 .46	4.60 .52	4.57 .53	4.00 .00	5.00 .00	-

Scale: 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a busine

4 = Much = It is important for students to learn about this competency.

3 = Some = It is helpful for students to learn some about this competency.

2 = Little = Students should be made aware of this competency.

1 = None = I do not believe students need to learn about this competency.

ITEM STATEMENT	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	OP N %
Which of the following competencies do you need to learn more about in order to present information about entrepreneurship to your students?									
(28-38)									
(1) Specific technical skills related to the type of business I would be interested in starting.....	- -	9 24	2 13	3 9	15 20	8 10	4 50	5 50	- -
(2) Accounting and/or bookkeeping skills.....	2 20	16 43	7 47	10 31	13 17	34 42	4 50	7 70	- -
(3) Advertising, selling and/or marketing skills.....	1 10	10 27	7 47	12 38	31 41	39 48	5 63	7 70	2 100
(4) Marketing research.....	3 30	15 41	6 40	11 34	39 52	41 51	4 50	7 70	2 100
(5) Business Law.....	3 30	19 51	9 60	16 50	21 28	42 52	5 63	7 70	2 100
(6) Developing a business plan.....	2 20	15 41	7 47	9 28	30 40	43 53	5 63	6 60	1 50
(7) Financing.....	- -	21 57	8 53	14 44	26 35	39 48	4 50	7 70	2 100
(8) Customer relations.....	- -	6 16	2 13	4 13	12 16	18 22	2 25	3 30	- -
(9) Employee relations.....	- -	5 14	3 20	5 16	10 13	20 25	1 13	3 30	- -
(10) Practical job experiences provided through courses at school.....	- -	6 16	- 6	2 6	6 8	6 7	3 38	5 50	- -
(11) Other.....	- -	2 5	- -	1 3	2 3	2 2	- -	1 10	- -
(7) Do you encourage students to start their own businesses? Omit.....	- -	- -	2 13	- -	- -	- -	- -	- -	- -
(1) Yes, I provide extensive encouragement to them.....	2 20	6 16	- -	6 19	5 7	3 4	1 13	1 10	- -
(2) Yes, I provide some encouragement to them.....	6 60	18 49	3 20	15 47	32 42	18 22	4 50	3 30	- -
(3) I neither encourage nor discourage them.....	2 20	13 35	10 67	11 34	39 51	56 69	3 38	6 60	2 100
(4) I tend to discourage them.....	- -	- -	- -	- -	- -	4 5	- -	- -	- -
(5) I consistently discourage them.....	-	-	-	-	-	-	-	-	-

ITEM STATEMENT	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	OP N %
(40) Within the courses you teach, which of the following are activities used by you?									
Omit.....	-	-	-	-	8	8	-	3	-
(1) Speakers.....	9	36	12	30	11	10		30	
	90	97	80	94	54 72	44 54	5 63	3 30	2 100
(2) Tours of business/industry.....	10	28	13	28	41	65	6	1	2
	100	76	87	88	55	80	75	10	100
(3) Seminars by business people.....	4	21	6	15	20	23	-	-	1
	40	57	40	47	27	28			50
(4) Co-op and work experience programs.....	5	25	13	20	23	27	2	1	2
	50	68	87	63	31	33	25	10	100
(5) Instructors from other areas.....	5	22	7	16	23	29	4	3	2
	50	59	47	50	31	36	50	30	100
(6) Other activities.....	3	9	4	7	10	5	3	2	-
	30	24	27	22	13	6	38	20	
(41) Do you try to include information on entrepreneurship in the activities listed in the question above?									
Omit.....	-	-	2	-	10	5	1	1	-
	-	-	13	-	13	6	13	10	-
(1) Yes.....	9	25	4	25	27	20	3	3	1
	90	68	27	78	36	25	38	30	50
(2) No.....	1	12	9	7	38	56	4	6	1
	10	32	60	22	51	69	50	60	50
(39) As an instructor, are you actively involved with any student organizations on campus?									
Omit.....	-	-	1	1	-	4	-	-	-
	-	-	7	3	-	5	-	-	-
(1) Yes.....	6	20	7	22	17	26	1	-	1
	60	54	47	69	23	32	13	-	50
(2) No.....	4	17	7	9	58	51	7	10	1
	40	46	47	28	77	63	88	100	50
(10) Does your community have a business incubator?									
Omit.....	1	1	1	1	1	1	-	-	-
	10	3	7	3	1	1	-	-	-
(1) Yes, and it is functioning.....	5	11	3	6	22	25	3	4	-
	50	30	20	19	29	30	38	40	-
(2) Yes, but it has not yet started operations.....	1	-	4	1	6	14	2	-	-
	10	-	27	3	8	17	25	-	-
(3) Not sure if there is a business incubator.....	2	20	6	18	32	30	-	3	2
	20	54	40	56	43	37	-	30	100
(4) No, there is no business incubator.....	1	5	1	6	14	12	3	3	-
	10	14	7	19	19	15	38	30	-
(11) What types of assistance does your VTAE provide to the business incubator? Omit.....	1	11	6	9	27	20	3	3	
	10	30	40	28	36	25	38	30	-
(1) Staff members are consulted to provide technical assistance to the businesses contained in the incubator.....	5	8	3	4	18	12	3	2	
	50	22	20	13	24	15	38	20	-
(2) Students complete co-op or work experience programs with the various businesses.....	3	5	1	6	11	6	2	3	-
	30	14	7	19	15	7	25	30	
(3) Businesses bring their problems and concerns into the classroom so students/staff can work with them in finding solutions.....	1	4	-	2	7	5	2	1	-
	10	11		6	9	6	25	10	
(4) I am not sure if the businesses in the incubator make use of the expertise of our school, students or staff members.....	4	14	7	15	28	44	2	4	2
	40	38	47	47	37	54	25	40	100

INSTRUCTOR SURVEY RESULTS BY QUESTION #4: HAVE YOU EVER OWNED A BUSINESS

A total of 283 instructors at 14 of the VTAE Districts within Wisconsin completed the instructor survey for the Entrepreneurship Project. One district returned completed instructor surveys after data had veen computer processed. That information is not included herein.

	Item Statement (FT = Full-Time, PT = Part-Time)	Total N / %	Yes-FT N / %	Yes-PT N / %	No N / %
(1)	Sex: Omit	-	-	-	-
	(1) Male	205	50	50	92
		70	75	75	65
	(2) Female	86	17	17	50
		30	25	25	35
(2)	Age: Omit	3	3	-	-
		1	4	-	-
	(1) 24 or younger	-	-	-	-
	(2) 25-34	24	5	4	15
		8	7	5	11
	(3) 35-44	122	25	37	60
		42	37	45	42
	(4) 45-54	91	20	26	45
		31	30	32	32
	(5) 55-64	49	14	14	21
		17	21	17	15
	(6) 65 or older	2	-	1	1
		1	-	1	1
(3)	Are you: Omit	-	-	-	-
	(1) Employed less than one-half time	8	5	1	2
		3	7	1	1
	(2) Employed one-half time or more	283	62	81	140
		97	93	99	99
(Top of page)	Program you instruct in: Omit				
	(1) Agribusiness				
	(2) Marketing Education				
	(3) Health Occupations				
	(4) Home Economics				
	(5) Business Education				
	(6) Trade & Industry				
	(7) Developmental Education				
	(8) General Education				
	(9) Other Programs				

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(4)	Have you ever owned and operated your own business?				
	Omit	-	-	-	-
	(1) Yes, full-time	75	67	8	-
		24	89	9	-
	(2) Yes, part-time	90	8	82	-
		29	11	91	
	(3) No	142	-	-	142
		46	-	-	100
(5)	Are you thinking about starting a business?	19	6	13	-
	Omit	7	9	16	-
	(1) Yes	65	20	23	22
		22	30	28	15
	(2) No	207	41	46	120
		71	61	56	85
(6)	When do you plan to start a business?	226	49	61	116
	Omit	78	73	74	82
	(1) Within one year	19	8	7	4
		7	12	9	3
	(2) Later than one year from now	46	10	14	22
		16	15	17	15
(8)	If you have owned and operated your own business or consulting firm, do you share information with your students about your business experiences?	103	1	2	100
	Omit	35	1	2	70
		109	52	44	13
	(1) Yes, I frequently share information with them ..	37	78	54	9
	(2) Yes, I occassionally share information with them	65	14	30	21
		22	21	37	5
	(3) No, I do not share information with them	14	-	6	8
		5	-	7	6
(9)	Do you present alternative ways students can enter into their own business with minimal costs?	25	3	3	19
	Omit	9	4	4	13
	(1) Yes, I encourage them to look for ways to start their own business with minimal cost	70	23	25	22
		24	34	30	15
	(2) I present alternatives but neither encourage nor discourage them	114	35	38	41
		39	51	46	29
	(3) I do not present alternatives to them	83	7	16	60
		28	10	20	42

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(12)	Within the courses that you teach, do you discuss the factors and competencies required of successful entrepreneurs?	2	-	1	1
	Omit	1	-	1	1
	(1) Yes, I provide students with much information ..	72	30	21	21
		25	45	26	15
	(2) Yes, I provide students with some information ..	122	30	43	49
		42	45	52	35
	(3) No, I do not provide information to students ...	95	7	17	71
		33	10	21	50
(13)	Within your school, have specific courses been developed on entrepreneurship?	3	1	-	2
	Omit	1	1	-	1
	(1) Yes	124	30	38	56
		43	45	46	39
	(2) Not sure	132	28	35	69
		45	42	43	49
	(3) No	32	8	9	15
		11	12	11	11
(14)	Do former students who have started their own businesses contact you for technical assistance?	12	3	2	7
	Omit	4	4	2	5
	(1) Yes	163	48	58	57
		56	72	71	40
	(2) No	116	16	22	78
		40	24	27	55
(15)	Do you have students work with business entrepreneurs in work experience or co-op programs?	7	1	2	4
	Omit	2	1	2	3
	(1) Yes	120	33	38	49
		41	49	46	35
	(2) No	164	33	42	89
		56	49	51	63
(16)	Within the courses you teach, do you study people who are entrepreneurs?	7	2	2	3
	Omit	2	3	2	2
	(1) Yes	92	32	26	34
		32	48	32	24
	(2) No	192	33	54	105
		66	49	66	74

Competency	Total Mean StD	Yes-FT Mean StD	Yes-PT Mean StD	No Mean StD
Rate the amount of importance that each of the following competencies has for students who would be starting their own business.				
(1) Specific technical skills related to the type of business the students would be interested in starting	4.72 .55	4.72 .49	4.70 .61	4.74 .54
(2) Accounting and/or bookkeeping skills	4.06 .86	4.14 .79	3.89 .95	4.13 .82
(3) Advertising, selling and/or marketing skills	4.28 .82	4.36 .70	4.25 .88	4.26 .84
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	4.02 .89	4.08 .82	4.00 .94	4.01 .89
(5) Business Law (laws & regulations that affect business)	3.71 .94	3.75 .91	3.60 1.00	3.76 .91
(6) Developing a business plan	4.36 .83	4.45 .75	4.26 .96	4.37 .78
(7) Financing (how to obtain money to start and operate a business)	4.37 .78	4.42 .66	4.24 .94	4.42 .71
(8) Customer relations	4.56 .67	4.60 .68	4.51 .78	4.57 .59
(9) Employee relations	4.45 .73	4.58 .63	4.40 .84	4.41 .71
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.)	4.36 .77	4.40 .77	4.25 .85	4.40 .72
(11) Other	4.66 .48	4.69 .48	4.64 .50	4.64 .50

Scale: 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a business.

4 = Much = It is important for students to learn about this competency.

3 = Some = It is helpful for students to learn some about this competency.

2 = Little = Students should be made aware of this competency.

1 = None = I do not believe students need to learn about this competency.

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(28-38)	Which of the following competencies do you need to learn more about in order to present information about entrepreneurship to your students?				
	(1) Specific technical skills related to the type of business I would be interested in starting ..	51 18	11 16	15 18	25 18
	(2) Accounting and/or bookkeeping skills	96 33	14 21	22 27	60 42
	(3) Advertising, selling and/or marketing skills ...	119 41	17 25	33 40	69 49
	(4) Marketing research	133 46	14 21	36 44	83 58
	(5) Business Law	130 45	23 34	31 38	76 54
	(6) Developing a business plan	122 42	16 24	34 41	72 51
	(7) Financing	130 45	20 30	33 40	77 54
	(8) Customer relations	49 17	7 10	12 15	30 21
	(9) Employee relations	50 17	8 12	11 13	31 22
	(10) Practical job experiences provided through courses at school	29 10	5 7	8 10	16 11
	(11) Other	9 3	3 4	5 6	1 1
(7)	Do you encourage students to start their own businesses?	2	-	-	2
	Omit	1	-	-	1
	(1) Yes, I provide extensive encouragement to them .	29 10	15 22	12 15	2 1
	(2) Yes, I provide some encouragement to them	109 37	30 44	36 44	43 30
	(3) I neither encourage nor discourage them	148 51	22 32	33 40	93 65
	(4) I tend to discourage them	4 1	1 1	1 1	2 1
	(5) I consistently discourage them	-	-	-	-

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(40)	Within the courses you teach, which of the following are activities used by you?	21	1	6	14
	Omit	7	1	7	10
	(1) Speakers	208	53	57	98
		71	79	70	69
	(2) Tours of business/industry	209	50	60	99
		72	75	73	70
	(3) Seminars by business people	96	30	24	42
		33	45	29	30
	(4) Co-op and work experience programs	125	27	33	65
		43	40	40	46
	(5) Instructors from other areas	120	34	29	57
		41	51	35	40
	(6) Other activities	44	13	14	17
		15	19	17	12
(41)	Do you try to include information on entrepreneurship in the activities listed in the question above?	21	2	9	10
	Omit	7	3	11	7
	(1) Yes	128	47	34	47
		44	70	41	33
	(2) No	142	18	39	85
		49	27	48	60
(39)	As an instructor, are you actively involved with any student organizations on campus?	7	3	2	2
	Omit	2	4	2	1
	(1) Yes	109	27	33	49
		37	40	40	35
	(2) No	175	37	47	91
		60	55	57	64
(10)	Does your community have a business incubator?	7	3	1	3
	Omit	2	4	1	2
	(1) Yes, and it is functioning	86	25	22	39
		29	37	27	27
	(2) Yes, but it has not yet started operations	29	5	10	14
		10	7	12	10
	(3) Not sure if there is a business incubator	120	24	30	66
		41	36	37	46
	(4) No, there is no business incubator	50	10	19	21
		17	15	23	15

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(11)	What types of assistance does your VTAE provide to the business incubator?	88	16	25	47
	Omit	30	24	30	33
	(1) Staff members are consulted to provide technical assistance to the businesses contained in the incubator	61	16	21	24
		21	24	26	17
	(2) Students complete co-op or work experience programs with the various businesses	38	10	7	21
		13	15	9	15
	(3) Businesses bring their problems and concerns into the classroom so students/staff can work with them in finding solutions	23	4	9	10
		8	6	11	7
	(4) I am not sure if the businesses in the incubator make use of the expertise of our school, students or staff members	127	28	35	64
		44	42	43	45

GRADUATE SURVEY RESULTS BASED ON SEX OF RESPONDENTS

A total of 204 graduates at 14 of the VTAE Districts within Wisconsin completed the graduate survey for the Entrepreneurship Project.

	Item Statement	Total N %	Male N %	Female N %
(2)	Sex: Omit			
	(1) Male	121 59	121 100	-
	(2) Female	83 41	- -	83 100
(3)	Age: Omit	1 0	1 1	- -
	(1) 20 or younger	10 5	3 2	7 8
	(2) 21-24	36 18	23 19	13 16
	(3) 25-34	88 43	49 40	39 47
	(4) 35-44	52 25	36 30	16 19
	(5) 45-54	15 7	8 7	7 8
	(6) 55-64	2 1	1 1	1 1
	(7) 65 or older	-	-	-

	Item Statement	Total N %	Male N %	Female N %
(Top of Page)	Program completed: Omit	-	-	-
	(1) Agribusiness	28	22	6
	(2) Marketing Education	49	31	18
	(3) Health Occupations	7	-	7
	(4) Home Economics	28	4	24
	(5) Business Education	25	10	15
	(6) Trade & Industry	65	53	12
	(7) Developmental Education	-	-	-
	(8) General Education	-	-	-
	(9) Other Programs	-	-	-
(1)	Length of your program: Omit	-	-	-
	(1) Less than 1 year vocational diploma	8 4	3 2	5 6
	(2) 1 year vocational diploma	54 26	33 27	21 25
	(3) 2 year vocational diploma	27 13	21 17	6 7
	(4) 2 year associate degree	102 50	52 43	50 60
	(5) Other type/length of program	14 7	13 11	1 1

	Item Statement	Total N %	Male N %	Female N %
(4)	Have you ever owned and operated your own business?			
	Omit	-	-	-
	(1) Yes, full-time	87 43	63 52	24 29
	(2) Yes, part-time	21 10	11 9	10 12
	(3) No	96 47	47 39	49 59
(5)	Do you currently own and operate your own business?			
	Omit	86 42	40 33	46 55
	(1) Yes, full-time	83 41	62 51	21 25
	(2) Yes, part-time	16 8	9 7	7 8
	(3) No	19 9	10 8	9 11
(6)	When did you start your business? Omit	105 51	50 41	55 66
	(1) Prior to completing my program	30 15	22 18	8 10
	(2) As soon as I completed my program	11 5	4 3	7 8
	(3) Within 1 year after completing my program	16 8	14 11	2 2
	(4) 2-3 years after completing my program	16 8	14 11	2 2
	(5) More than 3 years after completing my program ..	27 13	18 15	9 11
(7)	If you currently do not own and operate your own business, do you think you might start your own business? Omit	42 21	24 20	18 22
	(1) Yes, within 1 year	5 2	1 1	4 5
	(2) Yes, between 1-3 years from now	33 16	17 14	16 19
	(3) I am not thinking of starting a business	65 32	31 26	34 41
	(4) I already have my own business	59 29	48 40	11 13

Item Statement	Total N / %	Male N / %	Female N / %
(8) Did your VTAE instructors encourage you to start your own business? Omit	4	1	3
	2	1	4
(1) Yes, they provided extensive encouragement to me	14	7	7
	7	6	8
(2) Yes, they provided some encouragement to me	51	27	24
	25	22	29
(3) They neither encouraged nor discouraged me	131	84	47
	64	69	57
(4) They tended to discourage me	4	2	2
	2	2	2
(5) They consistently discouraged me	-	-	-
(9) While in school, were you aware of courses that would be helpful to you if you were to start a business? Omit	2	2	-
	1	2	-
(1) Yes	140	81	59
	69	67	71
(2) No	62	38	24
	30	31	29
(10) Did you take any of these courses before you completed your program? Omit	5	3	2
	2	2	2
(1) Yes	85	44	41
	42	36	49
(2) No	114	74	40
	56	61	48
(11) Why did you not take any of these courses? Omit	91	51	40
	44	41	47
(1) I was not interested in taking these courses ...	45	27	18
	22	22	21
(2) There was no room in my program to allow me to register for one or more of these types of courses	29	17	12
	14	14	14
(3) Other	43	28	15
	21	23	18

Item Statement	Total N %	Male N %	Female N %
(12) Which of the following courses have you taken while a student or at some time after graduating?			
Omit	59 8	42 10	17 6
(1) Small Business Management	51 25	30 25	21 25
(2) Business Law	82 40	45 37	37 45
(3) Finance	29 14	18 15	11 13
(4) Marketing	75 37	44 36	31 37
(5) Advertising	65 32	38 31	27 33
(6) Economics	95 47	52 43	43 52
(7) Business Communications	68 33	41 34	27 33
(8) Accounting/Bookkeeping	106 52	56 46	50 60
(9) Salesmanship	66 32	40 33	26 31
(10) Other	-	-	-
(13) Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business?			
Omit	7 3	4 3	3 4
(1) Yes	50 25	29 24	21 25
(2) No	147 72	88 73	59 71
(14) Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job?			
Omit	4 2	1 1	3 4
(1) Yes	78 38	49 40	29 35
(2) No	122 60	71 59	51 61
(53) Are you, or have you ever been, a member of any professional organization that is related to the type of business or job you currently have?			
Omit	-	-	-
(1) Yes	111 54	67 55	44 53
(2) No	93 46	54 45	39 47

Competency	Total Mean StD	Male Mean StD	Female Mean StD
(15-24) Rate the amount of information you learned about each of the following competencies while a student:			
(1) Specific technical skills related to the type of business I would be interested in starting ..	3.71 1.28	3.68 1.23	3.74 1.35
(2) Accounting and/or bookkeeping skills	3.05 1.35	2.97 1.29	3.16 1.44
(3) Advertising, selling and/or marketing skills ...	2.87 1.41	2.78 1.42	3.00 1.40
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	2.57 1.42	2.50 1.37	2.68 1.48
(5) Business Law (laws & regulations that affect business)	2.62 1.32	2.43 1.24	2.90 1.38
(6) Developing a business plan	2.33 1.20	2.25 1.12	2.45 1.31
(7) Financing (how to obtain money to start and operate a business)	2.13 1.18	2.12 1.16	2.14 1.22
(8) Customer relations	3.18 1.22	3.07 1.18	3.35 1.26
(9) Employee relations	3.00 1.29	2.88 1.24	3.18 1.35
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.)	3.69 1.36	3.65 1.28	3.74 1.47

Scale:
- 5 = Very Much = I had a specific course(s) in this or the information was provided to me in 3 or more of my classes.
- 4 = Much = I learned about this in one or more of my classes.
- 3 = Some = I learned some information about this in one or more of my classes.
- 2 = Little = I was made aware of this in one or more of my classes.
- 1 = None = I did not have the opportunity to learn about this in any of my classes. I am not sure what this area is about.

Item Statement	Total N %	Male N %	Female N %
(25-34) Which of the following competencies do you need to learn more about in order to start your own business? If you already own and operate a business, which competencies do you need to learn mroe about?			
(1) Specific technical skills related to the type of business I would be interested in starting ..	42 21	27 22	15 18
(2) Accounting and/or bookkeeping skills	76 37	49 40	27 33
(3) Advertising, selling and/or marketing skills ...	80 39	48 40	32 39
(4) Marketing research	73 36	37 31	36 43
(5) Business Law	88 43	46 38	42 51
(6) Developing a business plan	97 48	55 45	42 51
(7) Financing	100 49	56 46	44 53
(8) Customer relations	37 18	18 15	19 23
(9) Employee relations	42 21	21 17	21 25
(10) Practical job experiences provided through courses at school	31 15	18 15	13 16

Competency	Total Mean StD N	Male Mean StD N	Female Mean StD N
(35-49) Rate the amount of information you now believe students should receive for each of the following competencies in order to be better prepared to start their own businesses. Base the ratings on your experiences since graduating from school. Omit			
(1) Types of ownership (sole proprietorship, partnerships, corporations)	3.76 1.00	3.64 1.01	3.93 .95
(2) Procedures for obtaining technical assistance ..	3.90 .94	3.86 .85	3.95 1.06
(3) Identifying businesses (type of business, market research, etc.)	3.71 .92	3.63 .84	3.81 1.03
(4) Locating your business (geographical area, building location, etc.)	3.93 1.01	3.84 1.06	4.06 .93
(5) Protecting the business (insurance, employee theft, etc.)	4.08 .96	3.97 .98	4.23 .91
(6) Marketing the business	4.37 .89	4.40 .89	4.31 .90
(7) Taxation and the small business	4.02 .96	3.91 .97	4.19 .92
(8) Managing human resources	3.94 .95	3.86 .96	4.06 .93
(9) Short- and long-range planning	4.21 .94	4.12 .90	4.34 .97
(10) Public and community relations	3.88 .96	3.73 .94	4.10 .96
(11) Developing the preliminary business plan	4.18 .98	4.12 .93	4.26 1.06
(12) Financing for the business	4.31 .89	4.23 .83	4.43 .96
(13) Surviving business crises	4.12 1.00	4.05 .97	4.22 1.02
(14) Accounting and bookkeeping procedures for the business	4.23 .89	4.09 .95	4.42 .77
(15) Types of business (retail, wholesale, service, cottage, manufacturing, franchise, etc.)	3.59 .96	3.52 .95	3.68 .98

Scale:
- 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a business.
- 4 = Much = It is important for students to learn about this competency.
- 3 = Some = It is helpful for students to learn some about this competency.
- 2 = Little = Students should be made aware of this competency.
- 1 = None = I do not beleive students need to learn about this competency.

	Item Statement	Total N %	Male N %	Female N %
(50)	Is there a business incubator in your community or local area? Omit	1	-	1
		0	-	1
	(1) Yes	27	19	8
		13	16	10
	(2) Yes, but it has not yet started functioning	4	2	2
		2	2	2
	(3) Not sure if there is an incubator	127	67	60
		62	55	72
	(4) No, there is no incubator	45	33	12
		22	27	14
(51)	Have you ever had reason to contact the business incubator and determine if it could assist you with a new business venture? Omit	151	84	67
		74	69	81
	(1) Yes	5	2	3
		2	2	4
	(2) No	48	35	13
		24	29	16
(52)	While a student, were you actively involved with any student organization related to your program? Omit	1	-	1
		0	-	1
	(1) Yes	105	58	47
		51	48	57
	(2) No	98	63	35
		48	52	42

GRADUATE SURVEY RESULTS BASED ON THE PROGRAM AREA OF THE RESPONDENTS

A total of 204 graduates at 14 of the VTAE Districts within Wisconsin completed the graduate survey for the Entrepreneurship Project.

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
(2) Sex: Omit.....	-	-	-	-	-	-	-	-	-
(1) Male.....	22	31	-	4	10	53	-	-	-
	79	63	-	14	40	82	-	-	-
(2) Female.....	6	18	7	24	15	12	-	-	-
	21	37	100	86	60	18	-	-	-
(3) Age: Omit.....	-	-	-	-	-	1	-	-	-
						2			
(1) 20 or younger.....	1	2	-	3	2	2	-	-	-
	4	4	-	11	8	3	-	-	-
(2) 21-24.....	2	15	2	4	4	9	-	-	-
	7	31	29	14	16	14	-	-	-
(3) 25-34.....	11	15	2	17	4	38	-	-	-
	39	31	29	61	16	58	-	-	-
(4) 35-44.....	13	17	2	1	9	10	-	-	-
	46	35	29	4	36	15	-	-	-
(5) 45-54.....	1	-	1	3	5	4	-	-	-
	4	-	14	11	20	6	-	-	-
(6) 55-64.....	-	-	-	-	1	2	-	-	-
	-	-	-	-	4	1	-	-	-
(7) 65 or older.....	-	-	-	-	-	-	-	-	-
(Top of page) Program completed: Omit.....	-	-	-	-	-	-	-	-	-
(1) Agribusiness.....	28	-	-	-	-	-	-	-	-
(2) Marketing Education.....	-	49	-	-	-	-	-	-	-
(3) Health Occupations.....	-	-	7	-	-	-	-	-	-
(4) Home Economics.....	-	-	-	28	-	-	-	-	-
(5) Business Education.....	-	-	-	-	25	-	-	-	-
(6) Trade & Industry.....	-	-	-	-	-	65	-	-	-
(7) Developmental Education.....	-	-	-	-	-	-	-	-	-
(8) General Education.....	-	-	-	-	-	-	-	-	-
(9) Other Programs.....	-	-	-	-	-	-	-	-	-
(1) Length of your program: Omit.....	-	-	-	-	-	-	-	-	-
(1) Less than 1 year vocational diploma.....	2	-	1	2	-	3	-	-	-
	7	-	14	7	-	5	-	-	-
(2) 1 year vocational diploma.....	4	-	2	13	8	27	-	-	-
	14	-	29	46	32	42	-	-	-
(3) 2 year vocational diploma.....	5	5	-	1	1	15	-	-	-
	17	10	-	4	4	23	-	-	-
(4) 2 year associate degree.....	10	43	4	11	15	18	-	-	-
	34	88	57	39	60	28	-	-	-
(5) Other type/length of program.....	8	1	-	1	1	2	-	-	-
	28	2	-	4	4	3	-	-	-

ITEM STATEMENT	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	OP N %
(4) Have you ever owned and operated your own business?									
Omit.....	-	-	-	-	-	-			
(1) Yes, full-time.....	19 68	19 39	1 14	12 43	8 32	28 43			
(2) Yes, part-time.....	2 7	5 10	2 29	1 4	1 4	9 14			
(3) No.....	7 25	25 51	4 57	15 54	16 64	28 43			
(5) Do you currently own and operate your own business?									
Omit.....	6 21	22 45	3 43	15 54	15 60	24 37			
(1) Yes, full-time.....	20 71	17 35	1 14	12 43	5 20	28 43			
(2) Yes, part-time.....	1 4	2 4	1 14	1 4	1 4	9 14			
(3) No.....	1 4	8 16	2 29	- -	4 16	4 6			
(6) When did you start your business? Omit.....	7 25	31 63	5 71	15 54	18 72	28 42			
(1) Prior to completing my program.....	14 50	4 8	- -	1 4	3 12	8 12			
(2) As soon as I completed my program.....	2 7	1 2	1 14	5 18	1 4	1 2			
(3) Within 1 year after completing my program.....	3 11	2 4	- -	2 7	1 4	8 12			
(4) 2-3 years after completing my program.....	2 7	4 8	1 14	- -	1 4	8 12			
(5) More than 2 years after completing my program.....	- -	7 14	- -	5 18	1 4	13 20			
(7) If you currently do not own and operate your own business, do you think you might start your own business?									
Omit.....	9 32	9 18	- -	7 25	3 12	13 20			
(1) Yes, within 1 year.....	1 4	2 4	1 14	1 4	- -	- -			
(2) Yes, between 1-3 years from now.....	3 11	13 27	- -	6 21	4 16	7 11			
(3) I am not thinking of starting a business.....	4 14	15 31	5 71	6 21	15 60	19 29			
(4) I already have my own business.....	11 39	10 20	1 14	8 29	3 12	26 40			

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(8)Did your VTAE instructors encourage you to start your own business? Omit.....	1	1	2	-	-	-			
	4	2	29	-	-	-			
(1) Yes, they provided extensive encouragement to me...	4	3	1	4	1	1			
	14	6	14	14	4	2			
(2) Yes, they provided some encouragement to me.....	7	17	-	12	6	9			
	25	35	-	43	24	14			
(3) They neither encouraged nor discouraged me.....	16	28	4	11	17	53			
	57	57	57	39	68	82			
(4) They tended to discourage me.....	-	-	-	1	1	2			
	-	-	-	4	4	3			
(5) They consistently discouraged me.....	-	-	-	-	-	-			
(9)While in school, were you aware of courses that would be helpful to you if you were to start a business? Omit.....	-	2	-	-	-	-			
	-	4	-	-	-	-			
(1) Yes.....	23	39	2	20	17	37			
	82	80	29	71	68	57			
(2) No.....	5	8	5	8	8	28			
	18	16	71	29	32	43			
(10)Did you take any of these courses before you completed your program? Omit.....	1	2	-	1	-	1			
	4	4	-	4	-	2			
(1) Yes.....	12	32	1	16	8	15			
	43	65	14	57	32	23			
(2) No.....	15	15	6	11	17	49			
	54	31	86	39	68	75			
(11)Why did you not take any of these courses? Omit.....	12	34	1	16	9	18			
	43	69	13	55	36	27			
(1) I was not interested in taking these courses.....	7	5	4	2	6	20			
	25	10	50	7	24	30			
(2) There was no room in my program to allow me to register for one or more of these types of courses.	5	4	2	6	3	9			
	18	8	25	21	12	13			
(3) Other.....	4	6	1	5	7	20			
	14	12	13	17	28	30			

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
	N	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%	%
(12) Which of the following courses have you taken while a student or at some time after graduating? Omit.....	8	1	6	9	1	33			
	29	2	86	32	4	51			
(1) Small Business Management.....	8	18	-	11	6	7			
	29	37	-	39	24	11			
(2) Business Law.....	8	44	1	4	18	6			
	29	90	14	14	72	9			
(3) Finance.....	4	16	-	2	5	2			
	14	33	-	7	20	3			
(4) Marketing.....	8	47	-	3	9	7			
	29	96	-	11	36	11			
(5) Advertising.....	2	45	-	3	7	7			
	7	92	-	11	28	11			
(6) Economics.....	11	43	1	4	17	18			
	39	88	14	14	68	28			
(7) Business Communications.....	4	29	1	9	13	12			
	14	59	14	32	52	18			
(8) Accounting/Bookkeeping.....	14	43	-	11	23	14			
	50	88	-	39	92	22			
(9) Salesmanship.....	8	45	-	3	3	7			
	29	92	-	11	12	11			
(10) Other.....	-	-	-	-	-	-			
(13) Have you ever completed any seminars, workshops,etc. that would assist you in starting and operating your own business? Omit.....	2	2	1	-	-	2			
	7	4	14	-	-	3			
(1) Yes.....	6	16	-	8	7	12			
	21	33	-	29	28	18			
(2) No.....	20	31	6	20	18	51			
	71	63	86	71	72	78			
(14) Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? Omit.....	-	2	-	1	-	1			
	-	4	-	4	-	2			
(1) Yes.....	17	23	3	12	3	20			
	61	47	43	43	12	31			
(2) No.....	11	24	4	15	22	44			
	39	49	57	54	88	68			
(53) Are you, or have you ever been, a member of any professional organization that is related to the type of business or job you currently have? Omit.....	-	-	-	-	-	-			
(1) Yes.....	13	28	4	18	11	37			
	46	57	57	64	44	57			
(2) No.....	15	21	3	10	14	28			
	54	43	43	36	56	43			

COMPETENCY	AG MN StD	ME MN StD	HO MN StD	HE MN StD	BE MN StD	TI MN StD	DE MN StD	GE MN StD	OP MN St

(15-24)

Rate the amount of information you learned about each of the following competencies while a student:

(1) Specific technical skills related to the type of business I would be interested in starting.....	4.11 1.03	3.17 1.19	2.83 1.83	4.32 1.16	2.96 1.22	4.10 1.09			
(2) Accounting and/or bookkeeping skills.....	3.43 1.07	3.67 .97	1.83 1.33	2.71 1.46	4.24 1.05	2.18 1.09			
(3 Advertising, selling and/or marketing skills.....	2.79 1.10	4.29 .89	1.50 .84	2.96 1.20	2.58 1.53	1.95 .97			
(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes..	2.46 1.10	3.94 1.05	1.33 .82	2.75 1.40	2.25 1.39	1.67 .91			
(5) Business Law (laws & regulations that affect business).....	2.57 1.20	3.47 .96	2.00 1.26	2.96 1.43	3.36 1.29	1.57 .74			
(6) Developing a business plan.....	2.46 1.04	3.06 1.07	1.50 .84	2.54 1.29	2.33 1.34	1.65 .88			
(7) Financing (how to obtain money to start and operate a business).....	2.46 1.10	2.35 1.03	1.33 .82	2.32 1.28	2.42 1.50	1.65 1.01			
(8) Customer relations.....	3.00 1.15	3.71 1.02	3.83 1.17	3.54 1.23	2.92 1.25	2.67 1.16			
(9) Employee relations.....	2.64 1.22	3.52 .97	3.83 1.17	3.11 1.31	3.25 1.26	2.47 1.33			
(10) Practical job experiences provided through courses at school (work experiences, labs, etc.).....	3.96 1.14	3.10 1.42	4.83 .41	4.36 1.19	3.16 1.55	3.87 1.20			

Scale:
- 5 = Very Much = I had a specific course(s) in this or the information was provided to me in 3 or more of my cl
- 4 = Much = I learned about this in one or more of my classes.
- 3 = Some = I learned some information about this in one or more of my classes.
- 2 = Little = I was made aware of this in one or more of my classes.
- 1 = None = I did not have the opportunity to learn about this in any of my classes. I am not sure what t area is about.

ITEM STATEMENT (25-34)	AG N %	ME N %	HO N %	HE N %	BE N %	TI N %	DE N %	GE N %	OP N %
Which of the following competencies do you need to learn more about in order to start your own business?									
(1) Specific technical skills related to the type of business I would be interested in starting.....	5 18	13 27	2 29	1 4	8 32	13 20			
(2) Accounting and/or bookkeeping skills.....	4 14	18 37	3 43	12 43	4 16	34 52			
(3) Advertising, selling and/or marketing skills.....	10 36	15 31	4 57	8 29	10 40	33 51			
(4) Marketing research.....	6 21	14 29	5 71	6 21	12 48	29 45			
(5) Business Law.....	8 29	20 41	4 57	10 36	9 36	36 55			
(6) Developing a business plan.....	12 43	26 53	5 71	15 54	12 48	27 42			
(7) Financing.....	10 36	34 69	4 57	9 32	10 40	33 51			
(8) Customer relations.....	1 4	9 18	2 29	4 14	6 24	15 23			
(9) Employee relations.....	3 11	9 18	2 29	8 29	4 16	16 25			
(10) Practical job experiences provided through courses at school.....	3 11	10 20	3 43	- -	6 24	9 14			

COMPENTENCY	AG MN StD	ME MN StD	HO MN StD	HE MN StD	BE MN StD	TI MN StD	DE MN StD	GE MN StD	OP MN StD
(35-49)									
Rate the amount of information you now believe students should receive for each of the following competencies in order to be better prepared to start their own businesses. Base the ratings on your experiences since graduating from school.									
(1) Types of ownership (sole proprietorship, partnerships, corporations)	3.46 .88	3.90 .94	3.86 1.35	3.79 1.03	4.04 .86	3.62 1.07			
(2) Procedures for obtaining technical assistance	3.71 1.05	4.06 .66	3.71 1.38	4.04 1.06	3.88 1.12	3.83 .91			
(3) Identifying businesses (type of business, market research, etc.)	3.43 .92	4.08 .86	3.71 1.38	3.67 1.04	3.83 .96	3.51 .78			
(4) Locating your business (geographical area, building location, etc.)	3.82 1.16	4.24 .88	3.86 1.46	4.19 .83	4.04 .95	3.59 .99			
(5) Protecting the business (insurance, employee theft, etc.)	3.86 1.04	4.21 .82	4.00 1.53	4.29 .76	3.96 .95	4.02 1.02			
(6) Marketing the business	4.14 1.04	4.71 .50	4.14 1.46	4.00 .96	4.46 .93	4.32 .88			
(7) Taxation and the small business	3.89 1.01	3.96 .87	3.86 1.68	4.14 .76	4.17 .96	4.02 1.02			
(8) Managing human resources	3.54 1.26	4.18 .67	4.00 1.29	3.93 1.05	4.08 .88	3.86 .90			
(9) Short- and long-range planning	4.18 .94	4.45 .71	4.00 1.73	4.11 .99	4.38 .97	4.03 .93			
(10) Public and community relations	3.54 .84	3.78 1.01	4.43 .98	4.14 .89	4.21 .93	3.79 .97			
(11) Developing the preliminary business plan	3.96 1.14	4.57 .71	3.86 1.46	4.21 .96	4.13 1.01	3.98 .98			
(12) Financing for the business	4.18 1.19	4.41 .67	4.00 1.41	4.29 .85	4.42 .93	4.30 .84			
(13) Surviving business crises	3.96 1.17	4.14 .98	3.86 1.46	4.04 .96	4.39 .94	4.11 .92			
(14) Accounting and bookkeeping procedures for the business	4.21 .83	4.14 .91	3.86 1.46	4.41 .69	4.58 .65	4.11 .97			
(15) Types of business (retail, wholesale, service, cottage, manufacturing, franchise, etc.)	3.61 .96	3.53 .92	3.86 1.46	3.50 .92	4.21 .83	3.40 .94			

Scale:
- 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a busin
- 4 = Much = It is important for students to learn about this competency.
- 3 = Some = It is helpful for students to learn some about this competency.
- 2 = Little = Students should be made aware of this competency.
- 1 = None = I do not believe students need to learn about this competency.

ITEM STATEMENT	AG	ME	HO	HE	BE	TI	DE	GE	OP
(50) Is there a business incubator in your community or local area?									
Omit.....	-	-	-	-	-	2			
	-	-	-	-	-	1			
(1) Yes.....	3	7	1	2	2	11			
	11	14	14	7	8	17			
(2) Yes, but it has not yet started functioning.....	-	2	-	1	1	-			
	-	4	-	4	4	-			
(3) Not sure if there is an incubator.....	17	29	6	21	16	37			
	61	59	86	75	64	57			
(4) No, there is no incubator.....	8	11	-	4	6	16			
	29	22	-	14	24	25			
(51) Have you ever had reason to contact the business incubator and determine if it could assist you with a new business venture?									
Omit.....	22	37	4	21	22	44			
	79	76	57	75	88	68			
(1) Yes.....	1	-	-	2	1	1			
	4	-	-	7	4	2			
(2) No.....	5	12	3	5	2	20			
	18	24	43	18	8	31			
(52) While a student, were you actively involved with any student organization related to your program?									
Omit.....	-	-	-	-	-	1			
	-	-	-	-	-	2			
(1) Yes.....	15	39	4	14	10	22			
	54	80	57	50	40	34			
(2) No.....	13	10	3	14	15	42			
	46	20	43	50	60	65			

GRADUATE SURVEY RESULTS BY QUESTION #5:

DO YOU CURRENTLY OWN AND OPERATE YOUR OWN BUSINESS?

A total of 204 graduates at 14 of the VTAE Districts within Wisconsin completed the graduate survey for the Entrepreneurship Project.

	Item Statement (FT = Full-Time, PT = Part-Time)	Total N / %	Yes-FT N / %	Yes-PT N / %	No N / %
(2)	Sex: Omit				
	(1) Male	121 59	62 75	9 56	10 53
	(2) Female	83 41	21 25	7 44	9 47
(3)	Age: Omit	1 0	1 1	- -	- -
	(1) 20 or younger	10 5	1 1	- -	- -
	(2) 21-24	36 18	4 5	3 19	2 11
	(3) 25-34	88 43	39 47	8 50	5 26
	(4) 35-44	52 25	30 36	4 25	9 47
	(5) 45-54	15 7	7 8	1 6	3 16
	(6) 55-64	2 1	1 1	- -	- -
	(7) 65 or older	-	-	-	-

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(Top of Page)	Program completed: Omit				
	(1) Agribusiness				
	(2) Marketing Education				
	(3) Health Occupations				
	(4) Home Economics				
	(5) Business Education				
	(6) Trade & Industry				
	(7) Developmental Education				
	(8) General Education				
	(9) Other Programs				
(1)	Length of your program: Omit	-	-	-	-
	(1) Less than 1 year vocational diploma	8 4	6 7	1 6	- -
	(2) 1 year vocational diploma	54 26	23 27	2 13	6 32
	(3) 2 year vocational diploma	27 13	13 15	5 31	- -
	(4) 2 year associate degree	102 50	31 37	7 44	13 68
	(5) Other type/length of program	14 7	11 13	1 6	- -

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(4)	Have you ever owned and operated your own business?				
	Omit	-	-	-	-
	(1) Yes, full-time	87	81	2	4
		43	98	13	21
	(2) Yes, part-time	21	1	14	6
		10	1	88	32
	(3) No	96	1	-	9
		47	1	-	47
(5)	Do you currently own and operate your own business?				
	Omit	86	-	-	-
		42	-	-	-
	(1) Yes, full-time	83	83	-	-
		41	100	-	-
	(2) Yes, part-time	16	-	16	-
		8	-	100	-
	(3) No	19	-	-	19
		9	-	-	100
(6)	When did you start your business? Omit	105	1	-	18
		51	1	-	95
	(1) Prior to completing my program	30	25	5	-
		15	30	31	-
	(2) As soon as I completed my program	11	9	2	-
		5	11	13	-
	(3) Within 1 year after completing my program	16	11	4	1
		8	13	25	5
	(4) 2-3 years after completing my program	16	16	-	-
		8	19	-	-
	(5) More than 3 years after completing my program ..	27	22	5	-
		13	26	31	-
(7)	If you currently do not own and operate your own business, do you think you might start your own business? Omit	42	35	5	-
		21	42	31	-
	(1) Yes, within 1 year	5	-	1	1
		2	-	6	5
	(2) Yes, between 1-3 years from now	33	-	1	8
		16	-	6	42
	(3) I am not thinking of starting a business	65	-	-	10
		32	-	-	53
	(4) I already have my own business	59	48	9	-
		29	58	56	-

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(8)	Did your VTAE instructors encourage you to start your own business? Omit	4	3	-	1
		2	4	-	5
	(1) Yes, they provided extensive encouragement to me	14	9	2	1
		7	11	13	5
	(2) Yes, they provided some encouragement to me	51	20	4	5
		25	24	25	26
	(3) They neither encouraged nor discouraged me	131	49	10	11
		64	59	63	58
	(4) They tended to discourage me	4	2	-	1
		2	2	-	5
	(5) They consistently discouraged me	-	-	-	-
(9)	While in school, were you aware of courses that would be helpful to you if you were to start a business? Omit	2	2	-	-
		1	2	-	-
	(1) Yes	140	52	11	16
		69	63	69	84
	(2) No	62	29	5	3
		30	35	31	16
(10)	Did you take any of these courses before you completed your program? Omit	5	5	-	-
		2	6	-	-
	(1) Yes	85	34	6	9
		42	41	38	47
	(2) No	114	44	10	10
		56	53	63	53
(11)	Why did you not take any of these courses? Omit	91	41	6	10
		44	48	35	53
	(1) I was not interested in taking these courses ...	45	15	5	3
		22	18	29	16
	(2) There was no room in my program to allow me to register for one or more of these types of courses	29	9	2	3
		14	11	12	16
	(3) Other	43	20	4	3
		21	24	24	16

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(12)	Which of the following courses have you taken while a student or at some time after graduating?				
	Omit	59	30	6	5
		8	11	15	6
	(1) Small Business Management	51	26	3	6
		7	9	8	7
	(2) Business Law	82	29	5	12
		12	10	13	13
	(3) Finance	29	16	1	3
		4	6	3	3
	(4) Marketing	75	30	3	11
		11	11	8	12
	(5) Advertising	65	24	4	10
		9	9	10	11
	(6) Economics	95	32	7	13
		14	12	18	14
	(7) Business Communications	68	24	3	9
		10	9	8	10
	(8) Accounting/Bookkeeping	106	41	6	11
		15	15	15	12
	(9) Salesmanship	66	26	2	10
		9	9	5	11
	(10) Other	-	-	-	-
(13)	Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business?				
	Omit	7	4	1	-
		3	5	6	-
	(1) Yes	50	30	4	6
		25	36	25	32
	(2) No	147	49	11	13
		72	59	69	68
(14)	Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job?				
	Omit	4	3	-	-
		2	4	-	-
	(1) Yes	78	42	6	5
		38	51	38	26
	(2) No	122	38	10	14
		60	46	63	74
(53)	Are you, or have you ever been, a member of any professional organization that is related to the type of business or job you currently have?				
	Omit	-	-	-	-
	(1) Yes	111	58	5	8
		54	70	31	42
	(2) No	93	25	11	11
		46	30	69	58

	Competency	Total Mean StD	Yes-FT Mean StD	Yes-PT Mean StD	No Mean StD
(15-24)	Rate the amount of information you learned about each of the following competencies while a student:				
	(1) Specific technical skills related to the type of business I would be interested in starting ..	3.71 1.28	3.94 1.20	4.06 1.39	3.50 1.34
	(2) Accounting and/or bookkeeping skills	3.05 1.35	3.05 1.30	2.31 1.35	3.32 1.34
	(3) Advertising, selling and/or marketing skills ...	2.87 1.41	2.88 1.18	2.14 1.23	3.32 1.49
	(4) Marketing research (establishing extent and location of a market, analyzing costs of products/processes	2.57 1.42	2.41 1.27	1.60 .99	3.11 1.45
	(5) Business Law (laws & regulations that affect business)	2.62 1.32	2.43 1.26	1.88 1.20	3.11 1.37
	(6) Developing a business plan	2.33 1.20	2.30 1.06	1.47 .83	2.68 1.38
	(7) Financing (how to obtain money to start and operate a business)	2.13 1.18	2.11 1.15	1.53 .64	2.42 1.43
	(8) Customer relations	3.18 1.22	3.03 1.17	3.40 1.12	3.53 1.02
	(9) Employee relations	3.00 1.29	2.62 1.28	3.33 1.23	3.58 .90
	(10) Practical job experiences provided through courses at school (work experiences, labs, etc.)	3.69 1.36	3.63 1.34	3.94 1.18	3.32 1.70

Scale: 5 = Very Much = I had a specific course(s) in this or the information was provided to me in 3 or more of my classes.

4 = Much = I learned about this in one or more of my classes.

3 = Some = I learned some information about this in one or more of my classes.

2 = Little = I was made aware of this in one or more of my classes.

1 = None = I did not have the opportunity to learn about this in any of my classes. I am not sure what this area is about.

	Item Statement	Total N / %	Yes-FT N / %	Yes-PT N / %	No N / %
(25-34)	Which of the following competencies do you need to learn more about in order to start your own business? If you already own and operate a business, which competencies do you need to learn mroe about?				
	(1) Specific technical skills related to the type of business I would be interested in starting ..	42	13	2	4
		21	16	13	21
	(2) Accounting and/or bookkeeping skills	76	28	9	7
		37	34	56	37
	(3) Advertising, selling and/or marketing skills ...	80	36	4	6
		39	43	25	32
	(4) Marketing research	73	21	6	9
		36	25	38	47
	(5) Business Law	88	31	8	5
		43	37	50	26
	(6) Developing a business plan	97	29	10	7
		48	35	63	37
	(7) Financing	100	31	8	10
		49	37	50	53
	(8) Customer relations	37	12	1	4
		18	14	6	21
	(9) Employee relations	42	19	1	3
		21	23	6	16
	(10) Practical job experiences provided through courses at school	31	12	-	2
		15	14	-	11

	Competency	Total Mean StD	Yes-FT Mean StD	Yes-PT Mean StD	No Mean StD
(35-49)	Rate the amount of information you now believe students should receive for each of the following competencies in order to be better prepared to start their own businesses. Base the ratings on your experiences since graduating from school.				
	(1) Types of ownership (sole proprietorship, partnerships, corporations)	3.76 1.00	3.68 .95	3.75 1.29	4.05 .85
	(2) Procedures for obtaining technical assistance	3.90 .94	3.76 .94	3.69 .95	4.11 .66
	(3) Identifying businesses (type of business, market research, etc.)	3.71 .92	3.57 .85	3.31 .95	4.11 .81
	(4) Locating your business (geographical area, building location, etc.)	3.93 1.01	3.82 1.03	3.56 1.26	4.11 .81
	(5) Protecting the business (insurance, employee theft, etc.)	4.08 .96	4.10 .87	3.56 1.31	3.84 .83
	(6) Marketing the business	4.37 .89	4.43 .83	3.81 1.33	4.37 .68
	(7) Taxation and the small business	4.02 .96	4.05 1.02	4.06 1.18	4.00 .94
	(8) Managing human resources	3.94 .95	3.80 1.04	3.75 1.00	4.00 .82
	(9) Short- and long-range planning	4.21 .94	4.16 .90	3.75 1.18	4.17 .92
	(10) Public and community relations	3.88 .96	3.83 .99	3.31 .70	3.53 .84
	(11) Developing the preliminary business plan	4.18 .98	4.10 .96	3.87 1.36	4.00 .82
	(12) Financing for the business	4.31 .89	4.18 .90	4.06 1.18	4.21 .79
	(13) Surviving business crises	4.12 1.00	4.12 1.00	4.00 1.37	3.63 1.01
	(14) Accounting and bookkeeping procedures for the business	4.23 .89	4.35 .78	4.06 1.34	3.68 1.06
	(15) Types of business (retail, wholesale, service, cottage, manufacturing, franchise, etc.)	3.59 .96	3.51 .97	3.44 1.03	3.74 1.05

Scale:
- 5 = Very Much = It is critical for students to learn as much as possible about this competency to start a business.
- 4 = Much = It is important for students to learn about this competency.
- 3 = Some = It is helpful for students to learn some about this competency
- 2 = Little = Students should be made aware of this competency.
- 1 = None = I do not beleive students need to learn about this competency.

	Item Statement	Total N %	Yes-FT N %	Yes-PT N %	No N %
(50)	Is there a business incubator in your community or local area?				
	Omit	1	-	-	-
		0	-	-	-
	(1) Yes	27	9	3	3
		13	11	19	16
	(2) Yes, but it has not yet started functioning	4	3	-	-
		2	4	-	-
	(3) Not sure if there is an incubator	127	43	10	11
		62	52	63	58
	(4) No, there is no incubator	45	28	3	5
		22	34	19	26
(51)	Have you ever had reason to contact the business incubator and determine if it could assist you with a new business venture?				
	Omit	151	60	12	12
		74	72	75	63
	(1) Yes	5	1	1	1
		2	1	6	5
	(2) No	48	22	3	6
		24	27	19	32
(52)	While a student, were you actively involved with any student organization related to your program?				
	Omit	1	-	-	-
		0	-	-	-
	(1) Yes	105	34	7	14
		51	41	44	74
	(2) No	98	49	9	5
		48	59	56	26

Table 3: Sex of Respondents

Sex	Student	Instructor	Graduate
Male	41% (315)	70% (198)	59% (121)
Female	59% (447)	30% (85)	41% (83)
Total	(763)	(283)	(204)

Table 4: Age of Respondents

Age	Student	Instructor	Graduate
20 or younger	37% (283)	0% (0)	5% (10)
21-24	24% (181)	0% (0)	18% (36)
25-34	24% (185)	8% (24)	43% (88)
35-44	11% (86)	42% (119)	25% (52)
45-54	3% (22)	31% (89)	7% (15)
55-64	0% (3)	16% (46)	1% (2)
65 or older	0% (2)	1% (2)	0% (0)

Table 5: Program Enrolled In or Instruct In (N)

Program	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agribusiness	35% (21)	30% (9)	(30)	80% (8)	20% (2)	(10)	79% (22)	21% (6)	(28)
Marketing Education	35% (64)	65% (120)	(184)	68% (25)	32% (12)	(37)	63% (31)	37% (18)	(49)
Health Occupations	21% (10)	79% (37)	(47)	40% (6)	60% (9)	(15)	0% (0)	100% (7)	(7)
Home Economics	8% (8)	92% (93)	(101)	44% (14)	56% (18)	(32)	17% (4)	83% (24)	(28)
Business Education	20% (36)	80% (143)	(179)	61% (46)	39% (29)	(75)	40% (10)	60% (15)	(25)
Trade & Industry	82% (169)	18% (38)	(207)	100% (81)	0% (0)	(81)	82% (53)	18% (12)	(65)
Developmental Education				25% (2)	75% (6)	(8)			
General Education				35% (7)	30% (3)	(10)			
Other Programs				0% (0)	100% (2)	(2)			
TOTAL			(748)			(270)			(201)

Table 6: Encouragement to Start Own Business

Degree of Encouragement	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Extensive Encouragement	(19)	(31)	7% (50)	(17)	(9)	9% (26)	(7)	(7)	7% (14)
Some Encouragement	(59)	(84)	19% (143)	(75)	(29)	37% (104)	(27)	(24)	25% (51)
Neither Encourage nor Discourage	(228)	(323)	73% (552)	(101)	(47)	53% (148)	(84)	(47)	66% (131)
Some Discouragement	(3)	(5)	1% (8)	(4)	(0)	1% (4)	(2)	(2)	(4)
Consistent Discouragement	(2)	(1)	(3)						
TOTAL			(756)			(282)			(200)

Table 7: Have You Owned/Operated Own Business

	Student			Instructor			Graduate		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Yes, Full-time	(25)	(24)	6% (49)	(50)	(17)	23% (67)	(63)	(24)	43% (87)
Yes, Part-time	(24)	(22)	9% (46)	(63)	(19)	28% (82)	(11)	(10)	10% (21)
No	(265)	(402)	88% (668)	(101)	(47)	49% (148)	(47)	(49)	47% (96)
TOTAL			(763)			(291)			(204)

TABLE 8: Amount Of Information Learned About Competencies Useful For Starting and Operating Business (Mean = Total Group)

	Specific Technical Skills	Accounting and/or Bookkeeping Skills	Advertising, Selling, Marketing Skills	Marketing Research	Business Law	Developing a Business Plan	Financing	Customer Relations	Employee Relations	Practical Job Exper. Through Courses at School
STUDENT	3.36	2.68	2.71	2.45	2.50	2.27	2.16	3.25	3.30	3.51
GRADUATE	3.71	3.05	2.87	2.57	2.62	2.33	2.13	3.18	3.00	3.69
INSTRUCTOR	4.73	4.06	4.28	4.02	3.72	4.37	4.38	4.56	4.45	4.36

STUDENTS/GRADUATES:

KEY: 5 = VERY MUCH = MUCH INFORMATION PROVIDED IN 3 OR MORE CLASSES.
4 = MUCH = MUCH INFORMATION PROVIDED IN 1-2 CLASSES.
3 = SOME = SOME INFORMATION PROVIDED IN 1 OR MORE CLASSES.
2 = LITTLE = BEEN MADE AWARE OF THIS IN 1 OR MORE CLASSES.
1 = NONE = NO OPPORTUNITY TO LEARN ABOUT THIS IN ANY CLASSES.

INSTRUCTORS:

KEY: 5 = VERY MUCH = CRITICAL FOR STUDENTS TO LEARN MUCH ABOUT THIS.
4 = MUCH = IMPORTANT FOR STUDENTS TO LEARN ABOUT THIS.
3 = SOME = HELPFUL FOR STUDENTS TO LEARN SOME ABOUT THIS.
2 = LITTLE = STUDENTS SHOULD BE MADE AWARE OF THIS.
1 = NONE = DON'T BELIEVE STUDENTS NEED TO LEARN ABOUT THIS.

TABLE 9: Competencies You Need To Learn More About (Total N by %)

	Specific Technical Skills	Accounting and/or Bookkeeping Skills	Advertising, Selling, Marketing Skills	Marketing Research	Business Law	Developing a Business Plan	Financing	Customer Relations	Employee Relations	Practical Job Exper. Through Courses at School
STUDENTS (N=763)	26%	39%	36%	39%	40%	44%	50%	22%	19%	24%
GRADUATES (N=204)	21%	37%	39%	36%	43%	48%	49%	18%	21%	15%
INSTRUCTORS (N=283)	17%	33%	42%	47%	45%	42%	45%	17%	18%	10%

Table 10: How Students Would Learn More About Competencies Listed In Table 9 (N)

Method	Male	Female	Total
Daytime Courses	47% (149)	54% (243)	51% (392)
Evening Courses	56% (175)	46% (204)	50% (380)
Weekend Courses	12% (38)	13% (60)	13% (98)
Workshops/Seminars	37% (116)	47% (208)	42% (324)
Television Courses	17% (52)	16% (73)	16% (125)
Other	4% (13)	3% (12)	3% (25)

Table 11: Do Former Students Who Have Started Their Own Business Contact Instructors For Technical Assistance (N)

	Male	Female	Total
Yes	59% (116)	47% (40)	55% (156)
No	37% (74)	48% (41)	41% (115)

Table 12: Ideas About Products/Services That Could Be Turned Into A Business (N)

Response	Male	Female	Total
Yes, I have an Idea	53% (168)	43% (194)	48% (363)
No idea yet, but thinking about it	24% (77)	24% (106)	24% (183)
No, I have no idea	22% (69)	33% (146)	28% (215)

Table 13: Aware of Courses Helpful To Starting Business (N)

	Male		Female		Total	
Yes						
Student	35%	(219)	66%	(297)	68%	(517)
Graduate	36%	(81)	71%	(59)	69%	(140)
No						
Student	30%	(96)	32%	(145)	32%	(241)
Graduate	31%	(38)	29%	(42)	30%	(62)

Table 14: Taking Any Of These Courses (Table 13) Before Completing Program (N)

	Male		Female		Total	
Yes						
Student	35%	(109)	29%	(131)	32%	(141)
Graduate	36%	(44)	49%	(41)	42%	(85)
No						
Student	40%	(127)	43%	(192)	42%	(319)
Graduate	61%	(74)	48%	(40)	56%	(114)

APPENDIX H

COMPOSITE STUDENT SURVEY RESPONSES

ENTREPRENEURSHIP STUDY

36. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you have taken while a student. Exact titles may vary from VTAE school to school. Check if you have had a course with a similar content. Other related courses - Identify:

- American Inst.
- A.I. Principals of Supervision
- Retail Management
- Psychology I
- Entrepreneurship
- Supervision of Personnel
- Decision Making
- Assertiveness
- Cost Accounting
- Product Inventory Control
- Marketing Research
- Specialty Store - Ran a store as a class
- Credit Procedures - Purchasing
- P.M.A.
- Sales Principals.
- Human Relations
- Small Business Knowledge
- AMA - 6 courses
- Labor/Management Relations
- Language Communications
- Government/Veteran Relations
- Lotus/Accounting on Micros
- Math, English, Customer Relations
- Estimating
- Computer classes
- Professional Image/Resume' & Interviewing
- Needs of a Ferrier
- Supervisory Tech. I.
- Income Tax Preparation
- Personal Profile
- Creative Supervision
- Productivity Improvement
- Intro to Management
- Menu Planning
- Food Preparation
- Leadership & Development
- Design & Display
- CAD - System of Design
- Drafting
- Critical & Creative Thinking
- NC Programming
- Intro to American Business Enterprise
- Payroll
- Business Machines

37. If you were to learn more about the competencies listed in items #15-24, how would you do so? Other (Describe:

- Read on own-time
- Correspondence
- Any supplementary to full-time method
- Radio
- In labs.
- Ask instructor to provide more information relating to my needs.
- Experiences
- On-the-job-training
- VHS tapes
- Magazines/books
- Self paced course
- Self-learning

40. What other competencies do you feel are important for you to have in order to start a business?

- More Knowledge on feasibilities of business.
- Learning and applying new technology.
- Better individual cuonseling
- Proper Financing
- Perserverance
- To know what goes on out there in the business world.
- Learn more about bookkeeping.
- Need drive - imagination and self-motivation
- Experience
- Leadership & management qualities
- Enthusiasm/out-going personality
- Better research to see if my ideas would have any validity.
- Contact with people, mentor relationships and apprenticeships.
- More financial aid
- Business knowledge
- Communication skills/Computer courses
- Practical Experience
- 4 year degree
- Listen to people speak about their own business expereinces.
- Info on Tax Laws, Deductions.
- Step by step business/orgainzation procedures.
- How to find business contacts.
- Advertising
- Professionalism
- Dangers of owning your own business
- Commercial credit
- Lab experiences
- A lot of guts.
- Neatness/appearance very important.
- Honesty
- Good product lines and consumer demands.
- Stamina
- Stress Management
- Analysis of failed businesses to determine causes and ways to correct failures.
- Classes in layout and design
- Patience
- Trust in yourself
- Time management
- Networking
- Product knowledge - buying & selling
- Interviewing procedures.
- Experience on the job
- Cost Effective Management
- Common Sense
- Real Estate Purchasing
- Community knowledge
- Possible Volume per population
- How to get tax number & employee ID#
- Printing
- Partnership
- Archetechtural Knowledge
- work ethics
- Study Franchises

39. As an Instructor, are you actively involved with any student organizations on campus?

1. Decca, Food Club

40. Within the courses you teach, which of the following are actaivities used by you?

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Trade seminars
2. Daily events on video tape
3. In hospital or health-care related areas

43. Do you have any other comments?

1. Entrepreneurship is not a very valuable aspect of my health field.
2. developing own personal habaits-dress, attitude, etc.
3. Survey just formed to business and marketing dept.
4. Too much entrepeurship could flood local markets degrading the profit.
5. Next semester, I have a Intro to business course and will have yes answers.
6. I teach in the child care services program. The small business that students would go into would be a family day care on starting their own day care or nursery. I provide to students all the reasources available to them to do this if interested we also offer no-credit child-care courses that deal with this topic.
7. My area is not geared to entrepreneurship except for Medical Transcription
8. This has minimal relevance to two year program nursing students although there are some very interesting possibilities for nurse entrepeneurship educator a great awareness regarding where to refer the occasional interested student would be helpful.

Composite Instructor Survey Responses

Entrepreneurship Study

Question 39: As an instructor, are you actively involved with any student organizations in campus?

1. Culinary Arts Club
2. Interior Design Club
3. Internship
4. OEA
5. OT Club

Question 40: Within the courses you teach, which of the following are activities used by you?

1. Media.
2. Specific worksite assignments
3. Independent research
4. Clinical experience
5. Videos, role play, films
6. Interest, skills, values, inventories, training in occupational research and information, training on GIS software

Question 42: What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Time in schedule
2. Entrepreneurship personality
3. They are addressed in this survey
4. Be realistic - it takes work and time to succeed
5. Broad business experience in a variety of organizational settings
6. I don't know enough about starting a business to answer this question
7. Patent and copywrite laws
8. Humor
9. Success/failure rates, finances - (profit & loss)
10. I only need to know where to refer them to obtain information
11. My program is a vocational diploma course. Only entry-level skills are taught. Further training would be required to start ones own business.

Question 43: Do you have any other comments?

1. Because of the training I am involved with,these questions do not directly apply
2. We do not have classroom time to spend in this area. Present content takes all of time available.
3. I encourage memebership in student chapter of related professional organization
4. The nature of the business(es) I teach students to enter prohibits intial start-up due to the large financial outlay required for start-up and to be competitive in the marketplace.

39. As an instructor, are you actively involved with any student organizations on campus?

1. Advisor to Society of Mfg Engineers - SME
2. Marketing Management Club (DECA)
3. Acct Club
4. Robotics & Amateur Radio
5. Materials Management Society
6. Office Education Association

40. Within the courses you teach, which of the following are activities used by you?

1. I have had students go out and interview entrepreneurs and then report their findings in class
2. SME Seminars/Workshops
3. Films/Case studies
4. Films, videos, machines

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Most of my students are here to learn a skill at "job entry level" and are not prepared to go directly into business
2. Knowledge/experience of starting a business
3. Human relations - work habits that are positive; leadership skills
4. More first hand experience
5. Past experience, PE License
6. Private ownership US corporate status

43. Do you have any other comments?

1. Contracting/consulting is becoming popular with manufacturing
2. In the past I have taught "Small Business Management"
3. I have volunteered to help but no-one has asked for help
4. Our students,for the most part, are trained to work for others - the above mentioned points would be a valuable asset to most of our programs

39. As an instructor, are you actively involved with any student organizations on campus?

1. DECA
2. DECA, Fashion
3. Kosmetique Klub
4. NMA
5. Student Government
6. Health Occupations Students of America (HOSA)

40. Within the courses that you teach, which of the following are activities used by you?

1. Computer simulations
2. Hands-on with business people in school
3. Trade shows - Vica - Skill Olympics, promote student activities to delivery of services provided by students
4. Outreach activities to the place of business
5. Clinics, contacts, workshops, conventions, assoc/assoc meetings
6. Class project - open a business (do all of # 17-27)

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Creative thinking
2. Stressing the amount of timea business will take - very important!
3. Newness and changes in entrepreneurship
4. More computer skills
5. Computer basics - social, economic factors, human behaviors
6. A network in the district
7. Income tax information, stress management
8. Tax record keeping, inventory control pricing
9. I would take more grad level courses - I have several years of 25,000,000 and sales management experience

43. Do you have any other comments?

1. We should be doing much much more with entrepreneurship
2. Work experiences for our students is very restricted because it is a licensed area. Clean-up and/or receptionist is the only job available in our field.
3. More co-op based or identured programs - curriculum should insist on X amount of hours in industry related major
4. Service industries need to be emphasized as you are gearing up for
5. In career exploration section of instruction I deal with topic of beginning your own business
6. Do you know the difference between going into business and looking for a job?
7. Please realize that in my program there is only placement/employment type of entrepreneurship - at least, that I am aware of

39. As an instructor, are you actively involved with any student organization on campus?

1. CLUB
2. APICS Student Chapter
3. OEA, DECA
4. Pharmacy Technician Club
5. American Production and Invenetory Control Society
6. Plastics student organization
7. Prism Club
8. Office Education Association

40. Within the courses you teach, which of the following are activities used by you?

1. Company projects as lab activities
2. Apply concepts in a technical lab
3. Projects using data from students current job or business

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. None
2. Sales skills
3. Experience
4. Quality as it relates to service and products
5. As checked above
6. Communication skills
7. Somehow encourage risk taking
8. Examples of successive and failures--case studies

43. Do you have any other comments?

1. None
2. Survey assumes pedagogical teaching when 60% of present market is over 30.
3. "Competency" is an adjective, not a noun.
4. People come to us when they are in trouble and many time it's too late
5. Pharmacy technicians will not own their own pharmacies just as medical secretaries will not own a clinic.
6. Entrepreneurs are born a way should be found to bring it out
7. Good communications skills are also necessary
8. Students that take LTC courses related to #17-27 find them of little value because they are boring and do not relate to their major course

39. As an instructor, are you actively involved with any student organizations on campus?

1. Interior Design Club
2. Club
3. WHE-RSO
4. BIR

40. Within the courses that you teach, which of the following are activities used by you?

1. Cases, films
2. Video, handouts, films
3. Demonstrations by equipment manufacturers

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

43. Do you have any other comments?

1. Member of High Tech Consortium Committee and Wisconsin Innovative Network

39. As an instructor, are you actively involved with any student organizations on campus?

1. Student Affairs Committee
2. Not this semester, previously OEA
3. Student Chapter of DPMA
4. D.E.C.A.
5. Hort Club

40. Within the courses you teach, which of the following are activities used by you?

1. Field trips
2. Films, videos, tapes
3. Research projects, interview projects
4. Case studies and mini business projects

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Computer competencies forecasting skills
2. Experience working in the field
3. To remain updated in the field
4. Know about local companies recently started

43. Do you have any other comments?

1. Students should have working experience in the field before considering starting their own business.
2. Our program would like to participate in a fully developed co-op program rather than paraticipate in a limited manner. Our program currently operates its own alteration and design business at school.

39. As an instructor, are you actively involved with any student organizations on campus?

1. Civil Tech Club
2. Student Club & VICA
3. Alumni Association
4. Hotel/Restaurant and Industrial Club
5. OEA, VITA
6. Sporting Activity
7. DECA

40. Within the courses you teach, which of the following are activiites used by you?

1. Trade Journal Articles
2. Seminars & Contacts
3. Trade Shows
4. Field Trips - shows
5. Students interview people at their workplaces
6. Simulations

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Practical experience
2. Money
3. Statistics on types of business that have been successful. Prospects and future possibilities.
4. More information,books etc, simulations for computer use.

43. Do you have any other comments?

1. It takes money to make money. Our large corporations have the money. They're tough competition! Financial backing is a big plus!

2. I recommend 3-5 years of job experience before starting business on their own.
3. I do not teach the course directly related to this survey, but one is taught to students in our program by another instructor.
4. Entrepreneuring is the current bandwagon. We'll no doubt get a wave of it but its a personality trait that determines success in business. It's sort of the opposite of burnout - catching on fire.

39. As an instructor, are you actively involved with any student organizations on campus?

1. FSEA
2. Student Club
3. Water Quality Club, Student Senate
4. Food Service Executive Club
5. DECA
6. DECA
7. DECA
8. OEA
9. SAE
10. SME
11. Program Club
12. SME
13. Electronics Club

40. Within the courses you teach, which of the following are activities used by you?

1. Attend Trade Assoc meetings
2. Simulated activity - Laboratory application of theory
3. ETN, videos
4. Practicum field placements
5. Special projects where students describe how they applied some of what they are learning ar work and the results of same

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Time management
2. Realistic overview of the economy
3. Self-motivation, human relations, business law
4. Keener awareness of SCORE, of the assistance available from UW-Oshkosh via a small business counselor
5. Examples in detail, more statistics - #, by industry going "in" and "out" by year, etc
6. I believe17-27 pretty much covers this
7. I do not teach any course directly related to entrepreneurship
8. Practical experience
9. Economics
10. Employer-Employee relationship
11. Relationship to my program

43. Do you have any other comments?

1. I teach police science and its not a private business
2. This survey could not be answered fully because of the difference between business vs professional
3. Let's go! It gets more and more expensive everyday to work for somebody else!
4. Excellent concept
5. Students thinking of starting their own business need to be made aware of negative as well as positive aspects

39. As an instructor, are you actively involved with any student organizations on campus?

1. Student Nurse Club
2. Insurance Club
3. Laser Club
4. Small Business Management Club
5. IPS Club
6. DECA
7. Student Club, local Club
8. Electronics Club
9. Radiography, student club
10. Advisor of Mech. Design Club, SME

40. Within the courses you teach, which of the following are activities used by you? (Check all that apply)

1. exploring career options, communicating skills
2. core content instruction
3. Research of various materials
4. Go to Industry with students for training
5. On site clinical education

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Communication skills - Verbal & Written
2. Financing alternatives and sources of money
3. An interest - We aren't all entrepreneurs.
4. Creative problem solving
5. Need to know own strengths and weaknesses, so they can assist in these areas.
6. How do you get started - How do you get on a bid list to obtain work such as machining.

43. Do you have any other comments?

1. Though a rare number of nursing graduates start their own business, the AD program does not emphasize such endeavors. By the time and RN is planning such endeavors he/she is generally in contact with people outside of the walls of NTC.
2. Survey doesn't rally fit the Farmer population that I teach.
3. Your survey seems to assume a desire on everyones part to be in business for ones self. Sorry.
4. Students must have an inner drive to be an entrepreneur. We can teach people to be business managers - but not entrepreneurs.
5. I teach nursing assistants so the students are told about private home care - a service rather than business (selling) type activity. Encourage them to have a vision and then put it into a plan!

6. The bulk of this survey doesn't apply to our situation, we target grads to hospitals and clinics, there is no such animal as private practice X-ray.

39. As an instructor, are you actively involved with any student organizations on campus?

1. Management
2. DECA
3. Ad Club - VICA

40. Within the courses you teach, which of the following are activities used by you? (Check all that apply) Others, (Describe:

1. Video Tapes
2. Field Trips
3. Career exploration projects
4. Membership in organizations - Local, State, National & International, which help my professional growth and knowledge - I'm involved in them actively. Students benefit.

42. What other competencies do you feel are important for you to have in order to present information about intrepreneurship to your students?

1. Risk taking - handling failure
2. Networking
3. Attitude
4. Real work experience
5. Motivation, self-analysis
6. Have a good banker

43. Do you have any other comments?

1. I furnish the knowledge, bring your own container.
2. Not enough choices for accurate answers - a not too clear survey.

39: As an instructor, are you actively involved with any student organizations on campus?

1. PFPP
2. VICA
3. WHE
4. WHE/SRO
5. SWTBA
6. WHE-RSO
7. Agrifutures
8. Child Care Club affiliated with WHE/RSO

40: Within the courses that you teach, which of the following are activities used by you?

1. Simulations and direct interviews
2. Conventions

42: What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Business experience
2. Experience in business is very important
3. Human relations and practical experience
4. Computer
5. Taxwithholding for employees, income tax filing, unemployment information and procedures, social security withholding

43: Do you have any other comments?

1. I think my own on-going experience is the most helpful
2. I have had two courses in entrepreneurship
3. Not enough time to include these thiings
4. Some type addition to curriculum here would be a good move
5. In my field you can't teach all needs in the time allowed as is, you can't learn how to run a business and the trade in a year

39. As an instructor, are you actively involved with any student organizations on campus?

1. DECA - Marketing Associates Club
2. Home Furnishing Club
3. Ceach OEA and DECA participants
4. Small Engine Club
5. Past VICA club advisor - bowling Coach
6. Hospitality Management Club
7. Minority student retention program
8. HOSHA

40. Within the courses you teach, which of the follwoing are activities used by you? (Check all that apply) Other activiites (Describe:

1. Past graduates
2. Lecture Lab
3. Trade & Industry Shows
4. Restaurant Lab

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. Insurance for the entrepreneur
2. Some college level coursework
3. More finacial information on startup costs, risks

43. Do you have any other comments?

1. You insisted that all questions be answered but #8 was a contradiction after a "no" response to #5.
2. I have never had my own business. I feel I would need that experience to teach it.
3. I am a reading instructor, hence I do not teach any business courses.
4. (a) Why should I present info about entrepreneurship?
   (b) If I sould - when & where in a curriculum that is already too limited in time?
5. Would like to be included in final outcome of this project. (Juanita M. Decker C-110)

39. As an instructor, are you actively involved with any student organizations on campus?

1. WHERSO
2. OEA
3. ALPS
4. NAHB
5. Amateur Radio Club

40. Within the courses you teach, which of the following are activities used by you? (Check all that apply) Other activites (Describe:

1. Business simulations (computerized)
2. A/V Especially video of management, entre-, and motivation
3. Experiencial exercises in topics like decision making, style, conflict resolution, negotiation, assertion.

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your students?

1. More knowledge of the demographics of the area.
2. Job experience
3. Professional staff development available during summer.
4. How to obtain further training and when is it available.
5. Inspect personal traits/characteristics of a so called "risk-taker".
6. Time and more experise in bookkeeping.

43. Do you have any other comments?

1. Small business course in curriculum for baking program is very helpfull.
2. I can not name one student (who is working in an area directly related to his or her degree) who has started his/her own business.

3. I attempt to provide training that leads to more then just a skill.
4. A general course on small business operations as on elective would be nice for those that want it.

39. As an instructor, are you acatively invovled with any student organizations on campus?

1. State - Agri-future; Nat. PAS
2. VICA
3. WHE/RSO
4. WHE/RSO, Interior Design Club
5. DECA
6. Air Conditioning and Refrigeration Organization
7. Wood Tech, VICA
8. VICA

40. Within the courses you teach, which of the following are activities used by you?

1. State level competitions
2. Simulations
3. Simulations, Role Playing

42. What other competencies do you feel are important for you to have in order to present information about entrepreneurship to your studsents?

1. Experiences in industry prior to becoming an instructor.
2. More business accounting
3. Filling out state and federal forms.
4. Communication - oral and written
5. Business Law - Developing a Plan
6. I feel all instructors should go back into industry for updates on work experience, from time-to-time.
7. Develop a course within the program to explain more in detail.
8. Competencies are not the problem, time is!

43. Do you have any other comments?

1. It is sometimes difficult to include all the necessary info. within present course guidelines. I'd like to see a separate course that students can elect.
2. Our profession is changing so rapidly that it is really hard to teach a business entrepreneurship.
3. RE: Questions 17-27, some competencies can be handled by others and hired done, but technical skills related to the type of business and people skills are of great importance to the entrepreneur.
4. Not really - could be a real plus.
5. There is not enough time to present information on entrepreneurship within a two-year technical framework. We have trouble covering course material we already have in place!

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Communication skills, Real Estate Law
- Hard Knocks, learn as I go.
- Supervisory Techniques

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Business Related
- Real Estate courses and seminars
- Target Advertising
- ICAR, estimating
- DNR Hazardous Waste Workshop
- UW-Whitewater - 1 evening workshop - Owning Your Own Business.

14. Since graduating from school, have you contacted VTAE aschool teachers for help on technical assistance, either in regards to your business or job? Waht types of assistance have you requested of these teachers?

- Questions concerning the class.
- General
- Technical
- Assistance on Board of Advisors for Auto Body Repair & Painting
- How to do a buying plan; figuring open to buy.

54. Are there any other comments or suggestions that you may have regarding compentencies that would assist individuals who are considereing the starting of their own business?

- I think that it is important for teachers to make sure that the students realize that they are working with real people.
- Stress, long hours, low pay, and dedication. Before anyone jumps into a venture tell them to work for someone for at least 1 year and learn that business inside out.
- i do not feel the average graduate would have enough practical experience in Auto Body to open a shop and survive without on-the-job-training.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Market research
- Principals of business for Interior Design
- Ad, copy layout, retail (principals)
- DECA - Leadership
- Retailing, business law
- Entrepreneurship
- Day Care Management Course

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Direct Mail Seminar
- Professional Customer Service Training, First Impressions
- Computers in Medicine-IBM/PS/2 Computers

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Communication, Accounting(office) Market Research
- Recommendations of employees
- Survey Help
- Dennis Collins
- Aid in finding jobs.
- Work related situations
- Guidance in salesmanship
- Research questions
- Computer workshops, job advancements
- Employee referrals, equipment suggestions.

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

continued...

Question 54 continued...

- Typing & computers are very important and also Stress Management. State Law for Day Care .
- Cost Analysis - International Trade - re: tariffs, restrictions, etc. Small business computers/software.
- Realize your education should not stop when you graduate - Stay current in your information.
- I feel that the marketing program could be (or should be) a 2½-3 yr. course. More emphasis should be placed on certain areas which I have found I am lacking knowledge in: Advertising, accounting/bookkeeping, business law and COMPUTERS.
- Try to get as many people as possible into DECA - Marketing Club or whatever "club" pertains to each field.
- Learn the basics. Don't take any of Brice Hinsh classes.
- More business courses on employee management and finding financing.
- Extra - curricular activities such as DECA, Fashion Club, or any other club.
- To get aninsight on a step-by-step process when starting a business today!
- Communication bery important in talking or writing to customers/clients. Often a phone call or letter are the first contact with someone new and you must come across very confidently and professionally.
- A list of assisting agencies or organizations which will help.
- Consistant quality is very important.
- The competencies learned should be related specifically to the business which they want to start. At Fox Valley Tech., we had one course which related to most all of the competencies listed in our certain area of interest. This is an added bonus which every course should have!

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by <u>each</u> course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Sanitation
- Visual Merchandizing. A must for may types of businesses
- Public Speaking

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Alcohol Awareness,Food Handlers Courses.
- Design Seminar-Madison
- Customer Service, Salesmanship
- SDA

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Opinions, and business letter format
- Looking over written articles, use of library, double checking accounting procedures.
- Leads on buyers; advice on alot of items.

54. Are there any other comments or suggestons that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- There should be a course that shows all the required forms that must be filled out. Tax form, unemployement, comp., purchase orders, etc.
- Go slow - learn all you can about your trade and don't jump in over your head, money wise.
- Please have the instructors help develop common sense. Its so important. Our Horticulture Program needs to be updated in several areas!
  Never be afraid or say you don't have time to go back to school for a course that will help you. (You end up with a longer time reaching your goal and some costly mistakes - Go to libraries for information. Hve faith in all tha you were taught and use that knowledge! Tell yourself everyday of your goal and picture yourself at that goal. Establish a work habit and devote at least ½ hour of planning the execution of your goal. If you don't know something, don't be afraid to ask. My business is like a small child- Its wonderful to see it grow and my confidence right with it! Treat your customers as though you were them!

continued...

Question 54 continued:

- Sales training is of vital importance. Teach a cultural class one which can prepare you for dealing with people who have more education - A trip to the Art Museum/Opera/Music appreciation.

- A class that has in great detail and makes a student with guidance go through a business. Go to the Dept. of Govenment. Wrie a business plan, etc. The basic problem is each business is different. It is hard to classify it all as one case.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. Other (Describe:

- Marketing research, business math.

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (LIst:

- Equine related through horse clubs.
- Small business start up.
- Not at LTI.
- Factory sponsored seminars etc.

14. Since graduating form school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job?

- Opinion or confirmation of situation.
- Similar graduate such as myself who would be interested in working for me.

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Must be competent with keeping up with upcoming trends of your business area. Psychology of pleasing customers.
- Should have a good understanding of public and community relations, insurance, surviving and planning strategies for crisis. Can't stress enough comm-skills.

- Keep in mind a business requires time and has a lot of pressures. Make sure you give your family top priority of time. Don't short change them of the time they need with you!

- I don't feel that these in-depth business related courses would pertain to everyone, being that there is a very small percentage of graduates that will go into business. I would recommend strong encouragement of anyone contemplating, going into business to take these courases, especially of the ration of a 50% failure rate of new businesses.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Display, color
- Communications

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Fred Pryer Seminars and other speakers on business.
- Tom Aoykin, Zig Ziecfer
- Small Business
- Economic
- ATRA
- CRB, GRI
- Dale Carnegie - Human Relations and Management courses

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Student References
- Technical
- Price list for job I'm doing. Help in a certain assembly of a project.
- Photography marketing
- Recruiting sales people
- Video tapes or books
- Looking for employees

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Know your market, and have plenty of money and ambition. Ask lots of questions from people in the field.
- Attitude toward work - Desire - Promotion

continued...

- Setting up bookkeeping on software
- Cover your ass.
- Get professional help from the start. teachers, accountant, etc.
- Be willing to work very long hours and read a lot.
- I think it is very important to establish contacts in the business areas locally as well as nationally. Lectures and involvement with professional organizations offered alot of insight, knowledge and support to my business ideas. Learning how to deal with people and express my ideas to influence them is critical for my business.
- Know what types of courses to draw on for financial and technical aid in the running of a business.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by <u>each</u> course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Administrations
- Farm Training
- Pyscology of Human Relations

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Night course - Customer Relations

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Assistance in other employment searches within the field
- Farm Building project, free stall barn.
- Update information and continuing instruction.
- Farm Training program is vital to us and the farming community
- Technical information and business relations decisions hiring extra help and getting them to follow orders and respect authority.

54. Are there any other comments or suggestions that you may have regarding compentencies that would assist individuals who are considering the starting of their own business?

- Review come of the teachers and their methods. I felt 75% of time I worked alone with little or no guidance on work.
- It is critical that you learn as much as possible the more technical the better.
- I felt my education was fine. If I had to do it over I would do some things different and taken more slaes and marketing type rpograms. Personally I feel the instructors have a lot ot offer. I don't think that they are taken advantage of as much as they should be. More should be placed on the marketing of one's self. The most important thing I have learned is the importance of a positive mental attitude.(PMA) With a PMA <u>anything</u> can be done, regardless of one's education. If anything should be changed, a program involving the power of positive thinking and PMA should be added.
- We very much need the continuation of Farm Training Program - Starting a Farm business is very complex; and keeping it running is a challenge.
- Customer relations-how to assure a customer they have a quality product and how to deal with displaced anger and get the customer to trust you.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may bary from VTAE school to school. (Describe:

- Marketing research/credit procedures
- NHA Seminars
- Supervision, personnel

13. Hve you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Title: Starting a Small Business, through the University Extension about 15 years ago.
- WHA, NHA Seminars.
- Real Estate

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Asked for referral of current students for position opeining at my place of employment/also about cover letter when looking for employment.
- Problem solving in technical area.
- Recommendations for hiring people.
- Accounting

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Be prepared for headaches ulcers and own a set of brass balls - its fun!
- Hve a competent lawyer. A strong financial start. The proper attitude personality, expect long hours & hard work. Management very important.
- Work for someone in the business that you want to start before starting your own.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Business presentations, Traffic Management.
- Instructors touched on all of the above courses.

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and oeprating your own business? (List:

- Business Management,Accounting/Personalization

14. Since graduating from school, have you contacted VTAE school teachers for help ontechnical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- I offered to speak at classes regarding marketing.
- For referral or references.

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Something on internal and external business communications
- At the time I attended MATC emphasis was placed on skills to perform as an employee rather than employer. I think you need to emphasize both. Though I am struggling with my business skills, the technical training I received was excellent and has helped me obtain a very flexible and rewarding career!
- Be sure you protect yourself legally. Keep good records on supplies, payments, charges;etc. Do not put off something that can be completed that same day.
- I did not take my courses with any intention of starting my own business. They were taken to aid me in my job.
- Business Law - Bookkeeping
- Dedication

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Math

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Company sponsored training seminars and Chamber of Commerce sponsored seminars.
- Programs through our trade association.

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Finding jobs, setting up seminars.
- Employment-Potential student that are interested in my field.
- Technical questions specific to my field.
- Information on Bachelor's Degree.

54. Are there any other commnets or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Competency very important on getting professional assistance & advice (i.e. accounts, attorney's, insurance agents, bankers, chamber of Commerce, Professional organizations) and knowing when, where and who to go to.
- I really think that a hands on experience along with shcooling is very important and more placed on the job training.
- Talk to people who currently own their own businesses.
- Business means making a profit. In order to do that you need to know about dollars & cents, manageing customers and employees, plus marketing your concept and product.
- Increase in laboratory training.
- Students do not attend a school like this mearly do get book knowledge, they came to get knowledge of the real business world. Help them get it.

12. Listed blow are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. #10 - Other (Describe:

- None
- Dairy Farm Training Course

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (list:

- Yes, attended several through (Roffler) Franchise.
- Yes, at UWGM - Beginning Small business and a number of computer/customer relations - phone etiquette seminar

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? - What types of assistance have you requested of these teachers?

- Attended practical advanced class. Seeked advice from NWTI teacher regarding problems with employees.
- Called my prior instructor looking for possible employees
- I've called Lebrun & Senoff (woodworking) for employees.
- Farming Business
- Business related
- A wide variety of questions on the problems of dairy farming.

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- This survey is 10 years too late! I'm back as a student full-time now & co-own a construction co. The quality of education is greatly improved, but still after 10 years some of the poorest instructors remain and alot of 'politics' are still involved in grading. In all of the follow-ups I've completed none ever delve into how related a field your working in is to the field you graduated in.
  Beyond basic courses such as economics, math- the degree I hold from NWTC had nothing to do with the construction business I run.
  I've gained more from NWTC programs specifically geared toward my industry & organized by the Brown County Home Builders Organization. The communications program I'm in now offers involvement with Ad. Fed. I find it extremely helpful to be involved with real programs rather than DECA or leadership/character type programs. My involvement (as historian) in DECA 10 yrs. ago did nothing for me in the work world. It's these organizations that build responsible character yes, but generally it's those people - who already have these characteristics thatjoin such organizations. It's these outside activities which also play an important role in grading politics - which is sad. If you care for any further comment feel free to call or contact me at school through Chuck Noll or Mary Sue Fenner. - I'm more than willing to help!

- Customer relations and work quality very important.
- Above average skills in math, writing, english, and other basic skills is very important. The background skills and ability and desire to learn and succeed are far more important than any others.
- As your own boss, you must be knowledgeable in all aspects of self-employed business. Especially in making it worth-while financially.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Seminars updating Cosmetology new trends.
- Cake decorating
- In college beofre going to VTAE school

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Management By Objectives (Megun)
- UW-Platteville - Financial Management & Advertising for Small Business.

14. Since graduating from school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job?

- Different situations in Cosmo problems, updating classes.
- Inservice - without success.
- Assistance in supply companies, new equipment needed, difficulties baking techniques.
- Advice
- Advise on layout of store.
- Advise to Advertising,adding new things,=etc.
- Technical Help - Auto

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- I feel there should have been a future class to take after graduating involving the dealings of investing your money in a business. Other possibilities such as booth renting verses commission. Also bookkeeping.
- Learn all you can. It takes hard work and you will succeed.
- Get as much work experience in all types & sizes of business in your chosen field, so that you know exactly what you want before you try to go into business for yourself.
- Having the help of alumnus - who have charted this course - to help others avoid costly mistakes and pitfalls.
- The education I received was aimed at being anemployee not for any type of business ownership so there was no reason for classes (for me) to be structured for business ownership.
- Everyone needs encouragement and motivation to make their ideas come alive.
- Time Management

12. Listed below are courses which can be useful for indidviduals going into their own businesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- I had taken courses before auto body.

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and oeprating your own business? (List:

- At WCTC shop (owners and workers) talked.

14. Since graduating from school, have you conteacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- Job referrals.
- Job referances.
- How to get a job.
- Verbal Advice

54. Are there any other comments or suggestions that you may have regarding competencies that would assist individuals who are considering the starting of their own business?

- Learning about fiancing a business would be a monumental program to be with a requirement for small engine/chassis repair.
- I think students whould be aware of cost accounting in an area as auto body.

12. Listed below are courses which can be useful for individuals going into their own businesses. Place a check mark by each course that you completed while a student or at some time after graduating. Exact titles may vary from VTAE school to school. (Describe:

- Retailing
- Financial Management
- Investment, Retail Merchandising
- Computer Information Systems

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Farm Seminars
- Management Executive Seminar

14. Since graduating form school, have you contacted VTAE school teachers for help on technical assistance, either in regards to your business or job? What types of assistance have you requested of these teachers?

- How the components of an injecter system should be assembled.
- Interviewing help
- Word Processing

54. Are there any other comments or suggestions that you may have regarding comtetencies that would assist individuals who are considering the starting of their own business?

- As a bookkeeping major, working for others was the prime subject. The idea of being an independent never occurred to me or was ever suggested.
- I really feel the courses just brushed the surface of what one needs to know to start a business. It seems you have to dig for answers. Everyone at school discouraged a small business- tried to ralk students into franchises. No one on staff was aquainted with their own business... just text book information.
- I believe this survey really had very little to do with why I went to WITC as I went there to obtain my RN degree.
- People must first know what they are trying to achieve before they start. You can rely on yourself to do it if you know this.
- Some courses go into great detail when it is not really necessary, while some courses aren't detailed enough.
- Along with the theory of computers and their software, know the peripherals and their uses. Take time to develop technical expertise whatever the business.

own buisnesses. Place a check mark by each course that you completed while a student, or at some time after graduating. Exact titles may vary from VTAE school to school. Other (Describe:

- NONE

13. Have you ever completed any seminars, workshops, etc. that would assist you in starting and operating your own business? (List:

- Yes, Salesmanship courses seminars
- Yes, tax preparation

14. Since graduating form school, have you contacted VTAE school teachers for help on tachnical assistance, either in regards to your business or job?

- New Employees
- My interest in a dental hygiene program or taking courses that credits could transfer to a school with such a program.
- Advice on crop planning.
- Advice on cabinet making, advice about chemicals.

54. Are there any other comments or suggestons that you mayhave regarding competencies that would assist individuals who are considering the starting of their own business?

- The harder I work the luckier I get!
- Bring in more owners of businesses to classes to speak.
- Discuss types of overhead costs - Employee benefis - talk to local business people relating to their business interests.
- Have sufficient working capital and be prepared towork long hours. Stay on top of the paper work.
- Talk to small business people. Ask about their experiences. There are no courses call "hard Knocks".
- Just talking with counselors, reading pamplets and gathering as much information youcan in regards to your interests. I rate vocational education very high.
- Don't glamorize going into business as being your own boss as they will have more headaches than they ever will have working for someone else.
- It's imperative to have a plan and proceed slowly. You have to be able to recognize the low times and do your best to survive.